

FAMILIAL AND OBJECT RELATIONS CORRELATES OF
DISORDERED EATING IN FEMALE COLLEGE STUDENTS

BY

SANDRA SWINFORD-DIAZ

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Sandra Swinford-Diaz

Dedicated to my mother, Mickey, and my father, Bob, in loving appreciation of their unlimited support and encouragement. Also a big hug and kiss for my three children, Jennifer, Catherine, and Daniel, who had to live with me through this process.

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Sandra Swinford-Diaz

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College women are reported to experience a wide range of unhealthy eating behaviors and attitudes ranging from little concern with dieting and body image to extreme concern with dieting characterized by the use of fasting, bingeing, and purging behaviors. Research efforts focused on exploring the etiological factors associated with eating disturbances in this population have been limited however. The purpose of this study was to examine the contribution of familial and object relations factors in predicting the level of disordered eating experienced by female college students. The psychoanalytic model of disturbed eating served as the conceptual framework for this study.

The sample included 211 women enrolled as undergraduates at a large southeastern university. The majority of women ranged in age from 18 to

23. Participants completed questionnaires assessing their levels of disordered eating symptoms, object relations disturbances, and perceptions of the extent of hostility in their early mother-child relationships.

Correlational analyses were conducted to examine the relationships between the degree of mother-daughter hostility and object relations disturbances, the levels of mother-daughter hostility and disordered eating symptoms, and the levels of object relations disturbances and disordered eating symptoms. The level of hostility characterizing the mother-child relationship was significantly associated with three of the four object relations subscales (Insecure Attachment, $p \leq .05$; Alienation, $p \leq .01$, and Social Incompetence, $p \leq .01$).. In addition, there were significant associations between two of the object relations subscales and disordered eating (Insecure Attachment, $p \leq .01$, and Egocentricity, $p \leq .01$). However, the association hypothesized between the level of mother-daughter hostility and disordered eating symptoms was not significant. A hierarchical regression analysis was conducted to examine the relative contribution of the mother-daughter relationship variable and object relations disturbances in predicting the level of disordered eating. Results of this analysis revealed that although the level of hostility reported in the mother-child relationship did not explain a significant amount of the variance in disordered eating symptoms, a significant amount of variance was explained when object relations disturbances were related to disordered eating symptoms (the object relations' subscale, Insecure Attachment, predicted 7.5% of the variance in the EAT scores). Women reporting higher levels of disordered eating symptoms did report a greater number of object relations disturbances in the area of insecure attachment. Implications of these findings for the object relations theory of disordered eating, for counseling, and for further research were discussed.

CHAPTER I INTRODUCTION

Bulimia, a psychological disorder characterized by recurrent eating binges followed by fasting, purging, or vomiting, is seen most frequently in white females between the ages of 13 and 20 (Halmi, Casper, & Eckert, 1989). College women appear particularly vulnerable to this affliction with prevalence rates ranging from 5% to 19% (Halmi, Falk, & Schwartz, 1981; Katzman & Wolchik, 1984; Pyle, Halvorson, & Neuman, 1986). Moreover, the prevalence rates for women reporting frequent binge episodes of somewhat lesser severity than bulimia are even higher. Between 38% to 78% of all college women have been reported to suffer from these bulimia-type episodes (Halmi et al., 1981; Hart & Ollendick, 1985; Mintz & Betz, 1988; Ousley, 1986; Pyle, Mitchell, Eckert, Halvorson, Neuman, & Goff, 1983). Such estimates of the incidence of bulimia or bulimic-type syndromes among college women suggest a problem of major proportions for women in this life stage context.

Scope of The Problem

Although bulimic behavior has been noted in the literature as early as the late 1800s, it was not until the late 1970s, that the scientific community began to consider this as a distinct, clinical syndrome (Johnson & Connors, 1987). From the beginning there has been a great deal of disagreement among various researchers and clinicians concerning the nature of the criteria that should be used to identify, classify, and diagnose this disorder.

This lack of consensus has resulted in contradictory findings concerning the prevalence and correlates of this disorder.

In an attempt to rectify the shortcomings of this confusing situation, a number of theoretical and research efforts in the 1980s have been directed at isolating and defining precisely the more severe forms of this disorder. A good deal of theoretical debate, combined with research efforts, culminated with the publication of the criteria for Bulimia Nervosa in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R, American Psychiatric Association, 1987). This, in turn, has made it easier to begin to make some generalizations across research studies concerning correlates, prevalence, and etiological factors. However, as the definitions of this disorder became more specific, the populations studied became smaller and smaller. Using the most recent, DSM-III-R criteria, it is estimated that only between 1 percent and 3 percent of females are bulimic (Johnson & Connors, 1987).

Although there is necessarily some justification for identifying and studying the more severe forms of disordered eating, research has shown that less severe symptoms of bulimic-type eating that do not meet the criteria for bulimia occur at a very high frequency among women, particularly college women (Hart & Ollendick, 1985; Johnson & Connors, 1987; Mintz & Betz, 1988). For example, Hart and Ollendick (1985) found that 69% of the 234 university women surveyed reported binge eating; 54% reported the presence of binge eating combined with self-deprecating thoughts following binging; and that 17% not only engaged in binge eating, combined with self-deprecating thoughts, but also had fears of not being able to stop eating voluntarily.

Despite existing in large numbers on today's college campuses, this less-disordered population has rarely been examined in accounts of research

on bulimics, anorexics, and normals. This situation suggests the need for careful evaluation of past research to determine its application to this less disturbed population and for additional research that assesses a broader range of symptom levels (Mintz & Betz, 1988). A conceptualization of disordered eating, which would include a broader range of symptom severity, from the least to the most severe, seems necessary if mental health professionals are to attend to the problems of this large group of young women. Questions about the nature of college women's disordered eating need to be addressed. Are there a variety of different levels of bulimic eating disorders found among the female college student population? Are the same types of psychological disturbances associated with severe eating disorders also found among college women with less severe eating disturbances?

Several authors have proposed the concept of a disordered-eating continuum as a parsimonious and uniform way of thinking about this area (Mintz & Betz, 1988; Ousley, 1985; Rodin, Silberstein, & Striefel-Moore, 1984). This continuum defines a dimension ranging from no concern with weight, accompanied by normal eating, to anorexia or bulimia at the other extreme. Intermediate on the continuum would be unhealthy behaviors such as bingeing or purging alone, fasting, and chronic dieting. Given this continuum, one might propose that mid-range disordered eating would have similar correlates and causal factors as those of the more extreme symptoms, differing only in degree rather than in type of correlate and etiology.

One attempt to operationalize the idea of a disordered-eating continuum involves the distinction between "bulimia nervosa, the syndrome, and bulimia, the behavior (DSM-III-R, American Psychiatric Association, 1987; Fairburn & Garner, 1986; Mintz & Betz, 1988; Ousley, 1985). The

essential features of the syndrome of bulimia are a feeling of lack of control over eating; recurrent episodes of binge eating; self-induced vomiting, use of laxatives or diuretics, strict dieting or fasting, or vigorous exercise in order to prevent weight gain; and persistent overconcern with body shape and weight. In addition, a frequency stipulation is included; that is, the person must have had, on average, a minimum of two binge eating episodes a week for at least three months (Diagnostic and Statistical Manual of Mental Disorders, III-Revised, American Psychiatric Association, 1987).

The symptom of bulimia is less clearly defined however. In the past, the symptom of bulimia has generally referred to the behavior of bingeing or the consumption of a large quantity of food in a brief period of time (Ousley, 1985). The DSM-III-R (American Psychiatric Association, 1987) implies a much broader definition in their category "Eating Disorders Not Otherwise Specified," as they define this as "Disorders of eating that do not meet the criteria for a specific Eating Disorder" (p. 71). Fairburn and Garner (1986) suggested two forms of nonspecific eating disorders, atypical and subthreshold. Atypical eating disorders refer to cases in which at least one feature is absent, for example, a person who purges but does not binge, or who chronically diets. In contrast to the atypical eating disorders, subthreshold eating disorders refer to individuals who do not fulfill operational versions of the diagnostic criteria for anorexia nervosa or bulimia nervosa because one or more features, although present, are not of sufficient severity. For example, an individual who meets all the criteria for bulimia nervosa but who binges only one to seven times a month as opposed to eight times or more.

Although a few studies have compared bulimic symptom groups with bulimia syndrome groups in terms of prevalence and correlates (Hart &

Ollendick, 1985; Katzman & Wolchik, 1984; Ousley, 1986), only two studies have attempted to operationalize a disordered-eating continuum by using DSM-III-R criteria and investigating psychological differences among individuals who fall at various points on such a continuum (Heesacker & Neimeyer, 1990; Mintz & Betz, 1988;). Building on Fairburn and Garner's (1986) definition, Mintz and Betz (1988) created a disordered-eating continuum composed of six subgroups, that is, normals, chronic dieters, bulimics, bingers, purgers, subthreshold bulimics, and bulimics. They reported a high prevalence of disturbed eating among their sample of 643, nonobese, nonanorexic undergraduate women and concluded that "the data indicated that watching one's weight is the norm for college women, and for many women this means engaging in what could be considered unhealthy behaviors such as fasting and taking appetite control pills" (p. 469). Further, they found striking differences in both psychological and attitudinal characteristics among the six categories of women. Although the bulimics were clearly the least and the normals the most healthy in terms of overall self-esteem, body image, and beliefs about attractiveness, consistently intermediate values among the theoretically intermediate groups were also found. Mintz and Betz concluded that this provided strong support for the idea of a disordered-eating continuum.

Heesacker and Neimeyer (1990) investigated the relationship between eating disorder and disturbances in object relations and cognitive structure with 183 undergraduate females. Using a canonical correlation analysis they discovered that level of eating disorder was predicted by measures of object relations disturbance and cognitive structure, supporting the idea of a continuum of disordered eating.

The present study provided further empirical support for the finding that different levels of disordered eating exist among college women. In addition, it posed the question: Are the same types of psychological functioning and etiological factors associated with eating disturbances among college women reporting severe eating disturbances also present with women reporting less severe eating disturbances?

Theoretical Framework

Although its description varies widely, consensus has emerged that disordered eating typically involves the following symptoms: a drive for thinness; extreme dietary consciousness; alternating cycles of bingeing, purging, and restricting; low-self-esteem; feelings of ineffectiveness; depression; interpersonal sensitivity and impulsivity (Hart & Ollendick, 1985; Johnson & Connors, 1987; Katzman & Wolchik, 1984; Norman & Herzog, 1983; Ordman & Kirschenbaum, 1985).

There have been many theories advanced to explain the etiology of this cluster of symptoms. One of the most prominent is object relations theory. While there is a good deal of variation within this area, there are certain shared assumptions. First, object relations theory, itself, is based on the notion that certain intrapsychic structures develop during the child's early formative years. These structures have to do with the relational aspects of the child's personality and are thought to perform important "self" functions such as self-soothing, regulation of both internal and external stimulation and tension, maintenance of self-esteem, providing a sense of personality continuity and identity, as well as providing the basis for relating to both self and others (Kohut, 1965; Mahler, 1968; Winnicott, 1960).

It is hypothesized that individuals with disordered eating have certain major deficits in these internal structures as the result of early childhood

relational experiences and that for the bulimic, these deficits have never been repaired. It is thought that the resulting lack of internal resources is most desperately felt when the child reaches adolescence and there is an age-appropriate demand for separation-individuation. The inherent stresses of adolescence, especially the task of developing a personal identity, act to highlight these deficits and to threaten disruption of the continuing experience of the psychological self. The symptomatology, which usually emerges at adolescence, then becomes a desperate effort of the individual to defend against both excessive tension and the anxiety of personal disintegration (Goodsitt, 1983; Swift & Letven, 1984).

Swift and Letven (1984) illustrate this process in their theory of disordered eating. For the purpose of describing their theory, they identify a common sequence of "bulimic behavior." This sequence is as follows: restrictive dieting, bingeing, vomiting, relaxation, and repudiation. During the dieting phase of the sequence, the bulimic relies excessively on what ego functions she possesses in an attempt to gain mastery over her appetitive urges and food. She sees food as a treacherous hazard which must be negotiated and finds comfort in keeping food at a distance. She demonstrates expertise around nutritional issues and constantly surveys the surrounding food environment. In this process she temporarily overcomes one of her deficient tension-regulating functions: she established a stimulus barrier to food, a threatening object, although a rigid and vulnerable one. She also experiences some sense of self-mastery and psychological cohesion, vital needs difficult to meet in other contexts.

However, the skill and attention needed to maintain this tight control is too exhausting and exacting to last for long. In addition, the build-up of denied nutritional and passive-dependent needs resulting from the restrictive

dieting become too great. The result is loss of control and a binge. During the binge, the bulimic disregards any ego control, in an attempt to self-soothe and fulfill previously-denied dependency and nutritional needs. Food is now seen as an object that has defaulted on her and the eating pattern appears to be an attempt to control an untrustworthy object by magical introjection. This effort to self-soothe proves to be illusionary. She now begins to despise herself for losing control of her urges and her dependence on untrustworthy objects.

The function of vomiting in this sequence has been interpreted in several ways. Sours (1980) and Sugarman and Kurash (1982) think that vomiting counters the wished for but dreaded fusion with the archaic mother which is implicit in binging. Casper (1981) believes that the bulimic undoes her dependence on the hated food by expelling it. Swift and Letven believe that the vomiting primarily provides a means of tension-reducing gratification, unavailable to her in the more usual modes.

In the phase of relaxation, the bulimic briefly attains what Balint (1968) has called "primary love." This is a sort of harmonious merger between the self and the environment in which one feels free of threat from either sphere. Following the vomiting, she feels drained of the tension that chronically besets her and she can deeply relax. According to Swift and Letven, the bulimic sequence may be the only way she has of reaching this tension-free position.

As the internal tension resulting from her deficits in tension reduction begins to rise, the bulimic enters the final phase, repudiation. She now feels intense shame and guilt about her behavior, and promises herself that she will never do this again. Her underlying attitude is now one of denial and undoing as she begins the sequence again with restrictive dieting.

How do these faulty intrapsychic structures develop? Generally speaking they are thought to be the results of inadequate early (largely familial) relationships. In order to understand how these early relationships fail, it is also important to understand how object relations' theorists conceptualize the normal development of these internal structures.

The development of the structural capacity for object relations is thought to be tied primarily to the early, shifting relationship between the mother and infant. Winnicott (1965) proposed the term "holding environment" as a metaphor for the total protective, empathic care that the "good enough" mother provides the infant during the first few years of life. If the "mothering" is responsive to the child's shifting needs, the child will experience a sense of security, control, and understanding. This facilitates the acquisition of the internal capacity to perform functions previously performed by the parent, such as self-soothing (Winnicott, 1965).

Psychoanalytic theory identifies the following as essential components of "good enough mothering" (Winnicott, 1960). Nurturance and soothing refer to the mother's ability to provide emotional and affectional nourishment, comfort, and basic care giving (Winnicott, 1960) for the child. Empathic mirroring or empathy reflects maternal understanding and acceptance of the child's separate identity and experiences (Mahler, Pine, & Bergman, 1975; Winnicott, 1960). Tension and affect regulation describe the capacity to relieve, modulate, and organize strong emotional states (Goodsitt, 1983). If the maternal care is not good enough in these regards, or if the mother is unresponsive because of absence, ambivalence, rejection, or hostility, the child is unable to internalize important functions. This results in a self that must rely on external support to prevent fragmentation and feelings of ineffectiveness, helplessness, and confusion.

Current psychoanalytic theories of bulimia view food as the focus of some of the earliest and most enduring parent-child interactions, a focus which remains a symbol of mothering, nurturance, and soothing throughout the child's development (Mahler et al., 1975; Winnicott, 1960). Current psychoanalytic theories of bulimia have incorporated these interpersonal and relational aspects of eating into their psychogenic formulations. Binge eating is conceptualized as a pathological, externalized substitute for certain vital maternal functions that the bulimics never adequately internalized during childhood. These deficient maternal capacities are nurturance and soothing, empathic mirroring, and the effective regulation of tension and affective states (Goodsitt, 1983). Based on these central concepts, the psychoanalytic hypothesis of bulimia hypothesizes that the bulimic turns to food rather than other people or her own internal resources to find nurturance and soothing, to feel affirmed and understood, and to regulate overwhelming tension and emotions (Humphrey, 1986a, 1986b).

Although object relations literature has discussed the role of early attachments in disordered eating for some time (see Geist, 1989), relatively little empirical research has been directed at investigating either the hypothesized relation between maternal/child interaction and level of object relation development or the proposed link between object relation development and disordered eating. Also, there appears to have been no research investigating the psychoanalytic contention that it is primarily through the influence of object relations development as opposed to early family relations, that disordered eating is influenced.

Humphrey and colleagues, using a self-report measure developed by Benjamin (1974), have been able to provide the only compelling empirical evidence to date for the hypothesized relationship between the dyadic

mother/child relation, object relations development, and disordered eating. In a series of experiments, Humphrey (1986a, 1986b, 1987, 1988) compared the parental relationships and introjects of bulimics, bulimic-anorexics, and anorexics with normal controls. The results were very consistent in revealing that the bulimic subgroups experienced deficits in parental nurturance and empathy, as compared to normal young women. Further, both bulimics and anorexics viewed their parents as more blaming, rejecting, and neglectful toward them relative to normal controls. Also, the results showed that these three subgroups treated themselves with the same hostility and deprivation. Humphrey interpreted these findings as supportive of the psychoanalytic hypothesis of binge eating in bulimia.

Humphrey's empirical work is impressive, and provides a substantial amount of evidence in support of the influence of early family relationships on object relations development and disordered eating. More specifically, Humphrey's studies identify eating disordered clients' relationship with their parents as lacking in affirmation, encouragement, and nurturance and excessive in neglect, rejection, and blame. However, Humphrey's work does not address the issue of the relative effect of object relations development versus early family relations on disordered eating. Furthermore, all of Humphrey's work is aimed at the extremes of the eating disorder continuum (i.e. the bulimics, bulimic-anorexics, and anorexics). Would these same relationships hold true for less severe forms of disordered eating?

There has been limited research investigating the link between object relations and disordered eating. In this area as well, there has been little empirical evidence to either support or invalidate this idea. The works of Becker, Bell, and Billington (1987), Friedlander and Siegel (1990), and Heesacker and Neimeyer (1990) are three exceptions to this.

Becker, Bell, and Billington (1987) looked at the relationship of object relations disturbances to levels of disordered eating. They administered the Bell Object Relations Inventory (BORRTI; Bell, Billington & Becker, 1986) and an inventory assessing bulimia to over 540 college women. Becker, Bell, and Billington divided the sample into bulimics and nonbulimics and compared the scores of the two groups on four subscales of the BORRTI. Results of their study indicated that, compared to a sample of nonbulimic women, bulimic patients exhibited more than twice the percentage of object relations disturbances in the area of insecure attachment. This is consistent with the widely held belief that early developmental deficits in the self contribute significantly to the etiology and maintenance of disturbed eating (Bruch, 1985; Garner & Garfinkel, 1985; Geist, 1989; Heesacker & Neimeyer, 1990).

Heesacker and Neimeyer (1990) also found that higher levels of disturbed eating were related to particular patterns of object relations in their sample of 186 undergraduate women. More insecure attachment in formative, parental relationships as well as higher levels of social incompetence were associated with more extreme eating disorder symptoms. They concluded that "these results converge upon an image of eating disorder as reflecting a conflicting set of fears related to merger and autonomy. From these attachment disturbances the individual derives a sense of the self as indefinite and ineffective" (p. 14).

The recent work of Friedlander and Siegel (1990) provides further support for this object relation conceptualization. They used a sample of 124 undergraduate (97%) and graduate (3%) women to test the theoretical link between difficulties with separation-individuation and a set of cognitive-behavioral indicators characteristic of anorexia nervosa and

bulimia. The results showed that dependency conflicts and poor self-other differentiation were predictive of bulimia, the pursuit of thinness, an inability to discriminate feelings and sensations, distrust of others, immaturity, and beliefs about personal inadequacy. They concluded that these results support object relations claims that separation-difficulties signal serious emotional difficulties.

Each of these studies was designed in such a way that a wide range of disordered eating could be considered. However, they focused only on the second link in the psychoanalytic theory of disordered eating, the relationship between indicators of object relation development and disordered eating. The contention that early (largely familial) relationships are a primary factor in the development of object relations was neglected. Because of this, they were also not able to test the psychoanalytic contention that object relations are the primary mechanism by which disordered eating evolves (i.e. that perhaps the shared variance identified in these studies between object relations development and disordered eating is in fact the result of early family influence).

Need

The syndrome of bulimia is reportedly a significant problem among women in college, with incidence reports ranging from 5% to 19% (Halmi et al., 1981; Katzman & Wolchik, 1984; Pyle et al., 1986). Even more dramatic are the reports of disordered eating that do not meet the criteria for bulimia or anorexia nervosa. Reports of problematic bingeing have ranged from 38% (Mintz & Betz, 1988) to as high as 78% (Ondercin, 1979; Sinoway, 1983). Related problems such as chronic restrictive dieting, negative body image, and chronic weight preoccupation are all common among college women (Boskind-Lodahl & Sirlin, 1977; Carter & Moss,

1984; Garner, Olmstead, & Polivy, 1983; Mintz & Betz, 1988; Nagelberg, Hale, & Ware, 1984; Ousley, 1985). In addition, there is some research suggesting that psychological correlates of disordered eating, as well as causal factors, also exist on a continuum (Friedlander & Seigel, 1990; Heesacker & Neimeyer, 1990; Minz & Betz, 1988).

This perspective on disordered eating contrasts strongly with the more common approach in research and theory on this topic of identifying and studying only the extremes of bulimia nervosa and anorexia nervosa. Establishing the existence of such a continuum would be significant in several ways. Most importantly, it would expand the population identified for research, intervention, and treatment. In this way many of the problems associated with disordered eating, such as negative body image, fear of being fat, and low self-esteem, could be addressed and appropriate counseling interventions designed. Second, this approach could help professionals identify and intervene early on with individuals at risk for the more severe forms of this disorder.

The theoretical base and focus of this study is the psychoanalytic theory of disordered eating, whose central tenet is that the quality of early family relations influence the level of object relation development and that such object relations development is a primary component in the etiology and maintenance of disordered eating. While the empirical evidence is limited, the available evidence strongly supports this theory. Humphrey (1986a, 1986b, 1987, 1988; Humphrey, Apple, & Kirschenbaum, 1986) has conducted several studies investigating both the link between early family relations and object relations development and the link between object relations development and level of disordered eating. Her results strongly support the psychoanalytic theory. However, the research in this area has

dealt only with the more severe forms of disordered eating, comparing the subgroups of bulimia, bulimia-anorexia, and anorexia to one another and to normal controls. Moreover, Humphrey did not compare the effect of the level of object relations on disordered eating with early family influences. While a number of studies on less severely disordered populations support the link between object relations development and level of disordered eating (Becker, Bell, & Billington, 1987; Friedlander & Siegel, 1990; Heesacker & Neimeyer, 1990), the relationships of early family relations, object relations development, and disordered eating have not been examined concurrently. What is needed is further research examining the whole continuum of disordered eating. Within this context, researchers investigating the psychoanalytic theory of disordered eating need to look at both links in this theory of disordered eating as well as to investigate the psychoanalytic contention that object relations is the primary mechanism by which disordered eating develops. This study sought to address these issues.

Purpose

The purpose of this study was to explore the relationships among object relations development, early family relationships, and disordered eating for college women differing in their disordered eating symptomatology. Information was collected from undergraduate college women on three variables: early family relationships, object relations development, and level of disordered eating. Early family relationships were measured via the perceived mother/daughter relationship. First this study examined the contribution of the mother/daughter relationship variable in explaining variation in object relation development. This was designed to test the first link in the psychoanalytic theory. Second, object relations development was related to level of disordered eating to test the second link in the

psychoanalytic theory of disordered eating and the concept of an eating disorder continuum. Finally, the relative and joint contribution of early family relations and object relations to disordered eating was assessed. This was utilized to examine the psychoanalytic contention that it is primarily the mechanism of object relations development which influences disordered eating.

Research Questions

The following set of research questions was addressed in this study:

1. To what extent can variations in object relations development among college women be accounted for by variations in early familial influences (e.g. the amount of hostility in perceived mother/daughter relationship)?
2. To what extent can variation in disordered eating among college women be accounted for by variations in the level of object relations development?
3. To what extent can variations in disordered eating among college women be accounted for by variations in early familial influences (e.g. perceived hostility in mother/daughter relationship) ?
4. How much of the variance in disordered eating can be explained by early family relationships as opposed to level of object relations development?

Rationale

This study has implications for both research and practice. One important theoretical purpose, is to determine the nature of less severe forms of disordered eating. Do individuals with less severe forms of disordered eating have the same etiological and psychological correlates?

By means of this study the researcher sought to provide evidence for the psychoanalytic theory that it is primarily through the mechanism of object

relations development that disordered eating develops. This study was designed to test empirically one important theoretical construct.

These theoretical confirmations would certainly impact on the conceptualization and delivery of counseling services. If confirmed, it would encourage the development of broader-based intervention programs aimed at educating and treating less severe forms of disordered eating, as well as the more severe. It would also influence the nature of these interventions, emphasizing the importance of relationship issues such as ability to self-regulate, fear of abandonment, and lack of interpersonal trust, as well as the disordered eating behavior itself.

Definition of Terms

In order to facilitate understanding of the terminology used in this study, the key terms and concepts are defined below.

Early family relationships: mother/daughter dyad. The quality or style of early family relationships is a concept used by psychoanalytic theorists to refer to the interaction between significant family members and the developing infant. The relationship psychoanalytic theorists identify as most crucial to the developing child, is the mother/child relationship (Mahler, 1968; Winnicott, 1960). This dyadic relationship was operationalized in this study as the amount of perceived hostility versus affection on the affiliation dimension of the Structural Analysis of Social Behavior (Benjamin, 1974).

Object relations development. Object relations development is a psychoanalytic concept which states that experiences in significant early childhood relationships produce internal self-other representations (Kohut, 1964; Mahler, 1968; Winnicott, 1971). These internalizations serve as templates for contemporary experiences. With normal development these internalizations will grow more complex and differentiated in line with

certain distinguishable stages of development (Becker, Bell, & Billington, 1987). Psychopathology or disturbed object relations results from a disruption of this natural process (Kohut, 1971; Mahler, 1968; Winnicott, 1971). This concept was operationalized as the subject's responses to the Bell Object Relations Inventory (Bell, Billington, & Becker, 1986). This inventory asked the subject to endorse as either true or false, questions concerning her experience of herself in relation to others.

Disordered eating. This pattern includes a set of behaviors, feelings, attitudes, and beliefs about eating which is different from the norm and indicative of some degree of psychopathology. Disordered eating was measured with the Eating Attitudes Test (EAT, Garner & Garfinkel, 1979).

Disordered eating continuum. The concept of an eating-disorder continuum characterizes a dimension ranging from no concern with weight, accompanied by normal eating, to anorexia or bulimia at the other extremes. Intermediate on the continuum are unhealthy behaviors such as bingeing or purging alone, fasting, and chronic dieting.

Perceived hostility. This refers to the degree of hostility as opposed to friendliness perceived by the daughter in her relationship with her mother. The concept was measured on one of two primary, orthogonal dimensions on the Structural Analysis of Social Behavior (Benjamin, 1974). The dimension was affiliation, and it extended from attack, to attachment, with varying degrees between.

CHAPTER II REVIEW OF RELATED LITERATURE

The purpose of this chapter is to provide a review and analysis of the literature in support of the conceptualization of disordered eating as existing on a continuum. In addition, two related bodies of theoretical literature are explored. First, the theory that object relations development is based on the early familial (particularly the maternal/child) relationships and second, that disordered eating is due to disruptions or deficits in this early development of object relations. The chapter begins with a brief history on the definition and classification of bulimia and some of the shortcomings of this approach. Next, the incidence and parameters of binge eating in the nonanorexic, nonobese population are considered, followed by a review of literature on the prevalence and correlates of bulimia. This first section ends with a discussion of the demographics of eating disordered individuals and a summary. In the second part of the chapter, psychoanalytic theories of object relations development are reviewed. This is followed by a review of object relations theories of disordered eating and the research investigating the validity of the psychoanalytic theory of object relations development and the object relations theory of disordered eating .

Definition and Classification of Bulimia: Historical Perspective

In the latter part of the 1970s, reports began to appear concerning an eating disorder characterized primarily by the occurrence of uncontrollable eating followed by some type of purging. This "new" disorder was given several names including "Bulimia nervosa"(Russell, 1979), DSM III term

"bulimia"(American Psychiatric Association, 1980), dietary chaos syndrome (Palmer, 1979), compulsive eating syndrome (Green & Rau, 1974), binge-eating syndrome (Wermuth, Davis, Hollister, & Stunkard, 1977), and self-induced vomiting. All of these names described an unusual eating pattern that seemed related to but different from primary anorexia nervosa.

From the beginning there appeared to be much confusion and disagreement in the literature concerning this eating disorder. Not only has there been considerable disagreement about both the terminology and the criteria used to identify, classify, and diagnose this disorder, there has been substantial disagreement as to its status as a distinct diagnostic entity. The term "bulimia" first appeared in literature to describe symptoms of bingeing in anorexic patients (Beumont, George, & Smart, 1976; Casper, Eckert, Halmi, Goldberg, & Davis, 1980; Garfinkel, Moldofsky, & Garner, 1980; Russell, 1979; Vandereycken & Pierloot, 1983). These same symptoms were reported to occur in the obese (Gormally et al., 1982; Kornhaber, 1970; Loro & Orleans, 1981; Stunkard, 1959; Wardle & Beinart, 1981), as well as in patients with no history of weight disorder (Halmi et al., 1981; Mitchell & Pyle 1981; Pyle, Mitchell, & Eckert, 1981; Russell, 1979). The presence of these symptoms of bulimia in such divergent groups of women, as well as the fact that bulimic behavior so frequently followed an anorexic episode created questions in clinicians' minds as to whether bulimia was in fact a distinctive diagnostic category, or simply a subtype of anorexia nervosa symptomatology (Johnson & Connors, 1987; Russell, 1979). However, other research appeared (Beumont et al., 1976; Casper et al., 1980; Garfinkel et al., 1980; Strober, Salkin, Furrroughs, & Morrell, 1982) suggesting that anorexia nervosa patients manifesting bulimic symptoms represented a distinct subgroup from those who maintained a pattern of

rigidly controlled intake. More important was the growing evidence that bulimia was occurring at an alarming rate among normal weight women with no history of weight disorder (Halmi et al., 1981; Hawkins & Clement, 1980; Pyle et al., 1981; Russell, 1979).

In 1980, bulimia was included in the DSM-III (American Psychiatric Association, 1980) as a distinct clinical disorder. The diagnostic features included (a) episodic eating patterns involving rapid consumption of large quantities of food in a discrete period of time, usually less than two hours; (b) awareness that this eating pattern is abnormal; (c) fear of not being able to stop eating voluntarily; (d) depressed mood and self-deprecating thoughts following the eating binges; (e) three of the following behaviors were also needed: (1) consumption of highly caloric food; (2) eating in private during a binge; (3) termination of a binge through sleep, social interruption, self-induced vomiting, or abdominal pain; (4) repeated attempts to lose weight by self-induced vomiting, severely restrictive diets, or use of cathartics and/or diuretics; (5) frequent weight fluctuations due to alternating binges and fasts. Finally, it was specified that the bulimic episodes not be due to anorexia nervosa or any known physical disorder.

In discussing whether bulimia nervosa constitutes a separate syndrome, Russell (1979) stated: "It is important to set out clear diagnostic criteria which enable other clinicians and researchers to identify the disorder with consistency" (p. 445). In this sense, the DSM-III criteria represented an important step towards clarifying the confusion and disagreement surrounding this eating disorder. However, the criteria attracted many criticisms. One criticism was the use of the term *bulimia* to denote both a symptom and a syndrome (Fairburn, 1983; Garner, 1985). As a symptom bulimia refers only to excessive eating, whereas the syndrome denotes a

specific constellation of clinical features. According to Halmi, the diagnostic criteria for DSM III bulimia were little more than a description of "binge eating" (Halmi, 1983). Several authors felt that two core clinical features, namely the extreme concerns about shape and weight, and the behaviors designed to control body weight, were not specified. As a result, researchers contended that the proposed criteria failed to adequately distinguish between the *symptom* of bulimia and the *syndrome* and was therefore overinclusive (Fairburn, 1985; Fairburn & Garner, 1986).

The absence of a satisfactory index of severity was a second limitation that critics felt contributed to the overinclusiveness of the DSM III diagnostic criteria. The only requirement concerning severity was that the bulimic episodes be "recurrent." Significant descriptive research tended to support these criticisms and indicated that women who engaged in the behavior of bingeing and/or binge/purging on a weekly basis were quite different psychologically and behaviorally from those who experienced episodes of bulimia less frequently (Fairburn & Garner, 1986; Pyle et al., 1983).

The primary thrust of this early literature was to isolate and define the most extreme forms of disordered eating. While there were some research and discussion directed towards describing the less severe forms of disordered eating, these efforts were primarily a means for identifying and isolating the distinctive behavioral and psychological profile of individuals with the extreme forms of disordered eating.

In 1987, the revised edition of the DSM-III (DSM-III-R) was published. It incorporated most of the recommended changes, including a severity index, a stipulation referring to an excessive concern about body shape and weight, as well as behaviors used to control body weight. The diagnostic

criteria listed in the DSM-III-R to classify the syndrome of bulimia were as follows: (a) recurrent episodes of binge eating (i.e., a rapid consumption of a large amount of food in a discrete period of time); (b) a feeling of lack of control over eating behavior during the eating binges; (c) the person regularly engages in either self-induced vomiting, use of laxatives or diuretics, strict dieting or fasting, or vigorous exercise in order to prevent weight gain; (d) a minimum average of two binge eating episodes a week for at least three months; (e) persistent overconcern with body shape and weight.

Halmi (1983) listed four reasons for classifying clinical syndromes: (a) to allow clinicians to communicate about clinical phenomena; (b) to conduct and replicate research on clinical phenomena; (c) to elucidate clinical phenomena and allow classification to be revised, deleted, or otherwise changed; and (d) to properly design and evaluate treatment. Diagnostic accuracy in research and treatment is, according to Halmi, assured only by the establishment of criteria that adequately describe the clinical syndrome. This rationale encouraged and directed the refinement of the definition of the clinical disorder of bulimia nervosa and, for the reasons that Halmi (1983) identified, this refinement represented a positive contribution to the understanding of this disorder. However, these criteria excluded from consideration a whole range of disordered eaters. Not every disordered eater presents the classical features of anorexia nervosa or bulimia nervosa (Andersen, 1985). This is increasingly true as these clinical entities become more clearly defined. Fairburn and Garner (1986) suggested two diagnostic categories for these individuals. The first, "atypical eating disorder," is for people who have some of the features of bulimia nervosa or anorexia nervosa, but not all. The second category was labeled "subthreshold" and

includes those individuals who fulfill all of the diagnostic categories but have one or more features of insufficient severity. The DSM-III-R combines these two categories under the heading "Eating Disorder Not Otherwise Specified." The only criterion is disorders of eating that do not meet the criteria for a specified eating disorder. Others have suggested the idea of a disordered-eating continuum (Mintz & Betz, 1988; Ousley, 1986; Rodin, Silberstein, & Striegel-Moore, 1985). This concept characterizes a dimension ranging from little or no concern with weight, accompanied by normal eating, to anorexia or bulimia at the other extreme. Intermediate on the continuum are unhealthy behaviors such as bingeing or purging alone, fasting, and chronic dieting. The following section contains a review of evidence supporting the utility, for both research and clinical intervention, of conceptualizing disordered eating in terms of a continuum.

Incidence and Parameters of Binge Eating in the (Normal Weight) Populations

A growing body of research literature has focused on examining the incidence and parameters of the symptoms of bulimia (binge eating) in "normal weight" populations of women. Normal weight is defined as nonobese (obese is 20% or more above standard body weight for height and age) and nonanorexic (anorexic is 75% or less of standard body weight for height and age). Studies usually employ as a standard body weight range for a medium frame, corrected for height and age. One of the biggest problems in the research concerning "subthreshold" bulimics, or individuals with the symptom of bulimia (binge eating), is the problem of definition. This may account for a great number of the differences across studies in both prevalence and correlates of disordered eating not meeting the full diagnostic criteria. This lack of consensus concerning definition makes it difficult to

accumulate evidence concerning the nature of these behaviors. This, in turn, makes it difficult to provide clinical services for individuals suffering from this disorder. This section will present a review of the literature on binge eating and will present evidence to support the notion of a continuum of disordered eating as one way of conceptualizing, measuring, and treating individuals with these problems.

Ondercin (1979) published a study of 279 college women recruited from introductory psychology classes. Episodes of compulsive eating (i.e., overeating not in response to hunger) were reported by 78% of the women. Ondercin divided the group into three levels: (a) those identifying themselves as "definite" compulsive eaters (high), (b) "sometimes" compulsive eaters (medium), and (c) "not" compulsive eaters (low). Eighteen percent of the group were high compulsive eaters, 51% were medium, and 30% were low. A chi-square analysis revealed significant differences among the groups. High compulsive eaters tended to (a) eat more often in response to unpleasant affective states, (b) to eat when not hungry, (c) to experience guilt after overeating, (d) to think more about food, (e) to use food to reduce tension, and (f) to diet more than the medium or low groups. The low compulsive eaters tended to binge only a few times a year compared to once or more a week for the high group. The greatest weight dissatisfaction and most frequent weight fluctuations were reported by the high compulsive eaters. Unfortunately, no data were reported on the use of fasting, exercise, or purging to control weight; thus, it is possible that some of Ondercin's subjects were diagnosable bulimics.

Hawkins and Clement (1980) developed a nine-item self-report measure of behavioral and psychological aspects of bingeing. Using this scale they surveyed 247 normal weight women, 110 normal weight men, and 26

overweight (110-120% of standard body weight) women on a college campus. They found that 79% of the women and 49% of the men had engaged in bingeing. Binge eating had begun between the ages of 15 and 20 for the majority of the subjects. The severity of the binge eating was related to dieting concern and dissatisfaction with physical image for both men and women. In addition, the severity of bingeing for women was related to major life changes in the last month. Female bingers also reported more guilt after bingeing and more preoccupation with thoughts of food. The amount of deviation from ideal weight was not related to binge eating severity for males or females when degree of dieting concern was statistically controlled.

Ondercin's (1979) and Hawkins and Clement's (1980) findings have been supported by findings from two other studies. Dunn and Ondercin (1981) used Ondercin's (1979) scale and compared 23 high and 23 low compulsive eaters to each other and to a control group on several psychological tests. They found few differences between the control group and the low compulsive eaters. The high group was significantly different in several dimensions. They showed (a) a greater need for approval, (b) more inner tension and suspiciousness, (c) greater guilt proneness, and (d) less self-control and emotional stability than either the low or control groups. Wolf and Crowther (1983) conducted a similar study using Hawkins and Clement's (1980) Binge Scale. They identified mild, moderate, and severe binge eaters in a group of 255 women. Half of these women were normal weight (within 90-110% of standard body weight) and half were overweight (more than 10% over standard body weight). They found the following variables to be positively related to binge eating severity: (a) preoccupation with food, (b) concern about dieting, (c) fear of loss of control over eating,

(d) increased body image dissatisfaction, (e) low self-esteem, and (f) amount of stress experienced in the last year.

Pyle, Mitchell, Eckert, Halvorson, Neuman, and Goff (1983) administered a questionnaire to 1,355 freshman college students. The questionnaire allowed them to identify students who met the DSM-III criteria for bulimia. They administered this same questionnaire to a group of 37 female bulimic outpatients in treatment at an eating disorder clinic. Binging habits and weight control methods were compared between the bulimic patients and female bulimic student group, and between the female bulimic students and the female nonbulimic students. The results provide some insights into how the binging habits of nonbulimic women compare with a clinical and nonclinical sample of bulimic women. Pyle and his colleagues (1983) reported that 4.5% of the women surveyed met the DSM-III criteria for bulimia (a criterion of at least weekly binging was added). Of the nonbulimic women surveyed, 57.4% admitted to binge eating, 17.2% at least weekly. All bulimic patients, 77.8% of bulimic students, and 62% of nonbulimic students reported a fear of fat. Bulimic female students reported significantly higher prevalence and frequency for 24-hour fasting than nonbulimic female students. Bulimic female students also were significantly more likely to report having had treatment for alcohol and drug-related problems and were also significantly more likely to report having engaged in stealing behavior compared to nonbulimic female students. The use of weight control methods such as laxatives, diuretics, vomiting, and exercise were reported by 47% of nonbulimic students, although the majority used them less than weekly. Over half of the bulimic students and all of the bulimic patients induced vomiting at least weekly. Bulimic patients had a higher frequency (48.6%) of previous treatment for anorexia or bulimia than

either the bulimic students (8.8%) or the nonbulimic students (1.3%). Thus, these researchers (1983) concluded that while (a) binge eating, (b) fear of fat, (c) self-induced vomiting, (d) laxative and diuretic abuse, and (e) guilt from overeating were characteristic of the behavior of a large number of college women, there were significant differences in these behaviors among binge eaters and clinically and nonclinically diagnosed groups of bulimics.

In another study of the eating behavior of college women, Katzman and Wolchik (1984) recruited 80 female undergraduate students from introductory psychology classes. Selection for participation was based on responses to the following two questions: "Do you binge eat?" and "Do you frequently consume large amounts of food in short periods of time other than meals?" Women who responded positively to both of these questions and women who responded negatively to both were asked to participate in a study of eating habits of college women. During the experimental session, subjects completed a questionnaire that contained an operationalized version of the DSM-III criteria for bulimia. Women who fulfilled all of the diagnostic criteria for bulimia were classified as bulimic. Those women who reported eight or more episodes of binge eating a month but failed to meet one or more of the other operationalized criteria for bulimia were classified as binge eaters and those women who responded negatively to the two questions concerning binge eating were classified as controls. Thirty of these women were in the bulimic group, 22 in the binge-eater group, and 28 in the control group. The bulimic group exhibited (a) a greater preoccupation with dieting, (b) lower self-esteem, (c) poorer body attitude, (d) greater depression, and (e) a greater need for approval than the binge eaters. Bulimics also had (a) a greater average number of calories per binge, (b) a higher incidence of previous psychological treatment, (c) a greater

interest in treatment, (d) more life disruption from their eating problems, and (e) a more frequent history of anorexia nervosa. The binge eaters also had a history of more compulsive eating and a greater preoccupation with dieting than did the controls. All three groups' average ideal weight was thinner than the standard body weight for their age and height. Katzman and Wolchik concluded the syndrome of bulimia is associated with a greater amount of psychological disturbance than is the symptom of bulimia.

Nagelberg, Hale, and Ware (1984) explored the differences among three groups of college women differing in bingeing behavior: (a) weekly bingers ($n=14$), (b) binge-vomitters ($n=10$), and (c) controls ($n=7$), all recruited from a sample of 244 women in introductory psychology classes. Bingers had more restrained eating and more compulsive eating than controls. Purgers differed significantly from bingers by scoring lower on a measure of self-discipline and regard for social demand.

Katzman, Wolchik, and Braver (1984) examined the prevalence of bulimia and frequent binge eating in a group of college students enrolled in an introductory psychology course. Subjects were 327 males and 485 females. Katzman, Wolchik, and Braver (1984) asked all subjects the following two questions: "Do you binge eat" and "Do you frequently consume large quantities of food at times other than meals?" The 147 women who responded positively to both questions were then asked to complete a questionnaire that included (a) an operationalized form of the DSM-III criteria, (b) a repeat of the question "Do you binge eat?", (c) a question assessing interest in treatment for the eating problem, and (d) a rating of the degree of disruption caused by their eating habits on a scale ranging from 1 (not disruptive) to 7 (very disruptive). Results of the questionnaire responses indicated that 3.9% fulfilled all of the diagnostic

criteria for bulimia. An additional 3.3% of the women reported at least eight binge eating episodes a month, but failed to meet one or more of the other criteria for bulimia. All of the bulimic women viewed their eating habits as disruptive ($M=6.4$) and 93% reported an interest in treatment for their eating problem. The binge eaters viewed their habits as moderately disruptive ($M=3.6$) and 25% expressed a desire for treatment.

Hart and Ollendick (1985) did a study in which they surveyed both university women and a group of working women for the prevalence of binge eating and bulimia. The results of the Eating Behavior Questionnaire, adapted from Halmi, Falk, and Schwartz (1981), were as follows: 41% of the working women reported binge eating, 69% of the university women; when depressed and self-deprecating thoughts were added to the binge eating, the prevalence rates were still quite high, 27% for the working women and 54% for the university women. When the presence of binge eating was combined with self-deprecating thoughts and with fears of not being able to stop eating voluntarily, prevalence estimates were at 9% and 17%, respectively.

Ousley (1986) surveyed by mail a cross-section of undergraduate women at the University of California. A random sample of 1,487 women were selected, and 813 women or 54% responded. Ousley classified and compared four groups of women: (a) a control group of normal eaters, (b) a group of purging bulimics, (c) nonpurging bulimics, and (d) a symptom group of binge eaters. Ousley found that the bingers had a greater degree of preoccupation with dieting and weight and dissatisfaction with their bodies than did the controls. The differences found between bingers and bulimics were similar to findings by Katzman and Wolchik (1984). The bulimics had a greater concern with weight and dieting, a poorer body image, and greater

difficulty with intrapersonal and interpersonal relations as indicated by the CBSI. Ousley concluded that, while the syndrome of bulimia is associated with a greater amount of psychological disturbance than is the symptom of binge eating, there were significant differences between bingers and nonbingers, and between bingers and DSM-III bulimics.

Schotte and Stunkard (1987) studied the incidence of bulimia vs. bulimic behaviors on a college campus. They conducted a self-report survey with 1,965 students selected to provide a cross section of a large, eastern university. Follow-up interviews of a subsample of respondents were conducted to validate the survey. Binge eating was reported on a monthly or more frequent basis by 44.7% of the females and 29.1% of the males, and twice weekly or more often by 10.1% of the females and 15.0% of the males. The rates for bingeing and purging were considerably less (3.1% and 1.0% monthly for females and 0.7 and 0.5 for males). Decreases in prevalence were also observed when DSM-III bulimic symptoms other than vomiting were added to binge eating. For example, while binge eating at least twice per month was relatively common among women (32%), a far smaller percentage (2.7%) reported "often" or "usually" fearing loss of control over their eating during binges. As additional diagnostic criteria for bulimia were included, these percentages decreased further.

Finally, Mintz and Betz (1988) used an operationalized DSM-III-R criteria to categorize college women into one of six groups along a continuum from normal to eating disordered behaviors. They used this continuum to assess the nature and prevalence of disordered eating among college women. They also identified and compared the psychological and attitudinal characteristics of women classified into these different categories. They concluded that the frequency of disturbed eating behaviors among

college women was quite high; for example, 82% of subjects reported one or more dieting behaviors at least daily, and 33% reported more serious forms of weight control (i.e., use of laxatives or vomiting) at least once a month. Thirty-eight percent reported problems with bingeing. Mintz and Betz (1988) also found significant differences in both psychological and attitudinal characteristics among the six categories of women. Although bulimics were clearly the least and normals the most healthy in terms of overall self-esteem, body image, and beliefs about attractiveness, consistently intermediate values among the theoretically intermediate groups were found. They concluded that these results provided support for the idea of an eating disorders continuum.

In summary, the researchers' understanding of "subthreshold bulimics" has been handicapped by the lack of clear definitions concerning the phenomena being studied. Each of the researchers whose studies were reviewed in this section used different definitions of disordered eating, and looked at different correlates. This lack of uniformity makes it very difficult to draw many conclusions. However, several important trends can be distilled from this research. First, there are a large number of young women engaged in forms of disordered eating that do not meet all of the criteria for the clinical disorders of bulimia and anorexia nervosa. Second, a significant number of these women suffer psychological and emotional distress. Third, these women fall into categories that are rarely taken into account either in research comparing bulimics and normals, or anorexics/bulimics and normals. Finally, if we are to understand the psychological correlates of less severe forms and their relationship to the clinical disorders of bulimia and anorexia nervosa, it is important to have consistency and precision in definitions and criteria. The concept of an eating-disorder continuum

provides a parsimonious and valid way of looking at all ranges of disordered eating.

Prevalence of Bulimia

Due to the shifting definition of bulimia nervosa, as well as the different criteria used by different researchers, the reported prevalence rates for bulimia nervosa as well as the bulimic symptoms are varied. This diversity makes it difficult to draw conclusions about the prevalence of this disorder. Most studies of the incidence and correlates of the syndrome and the symptoms of bulimia have used self-report measures (Crowther et al., 1985; Drenowski et al., 1988; Dunn & Ondercin, 1981; Fairburn & Cooper, 1983; Halmi et al., 1981; Hart & Ollendick, 1985; Hawkins & Clement, 1980; Johnson et al., 1982; Johnson et al., 1984; Katzman & Wolchik, 1984; Mintz & Betz, 1988; Mitchell, J.E., Hatsukami, D., Eckert, E., & Pyle, R.L., 1985; Ondercin, 1979; Pyle et al., 1983; Wolf & Crowther, 1985).

Halmi, Falk, and Schwartz(1981) surveyed 355 male and female summer school college students . They used a self-report questionnaire of eating and weight control habits, and used the DSM- III criteria. Results of the survey indicated that within this college population, 13% experienced all of the major symptoms of bulimia, 87% of this group were female (19% of the total female population), and 13% of this group were male (5.9% of the total male population). The diagnoses adhered strictly to the DSM-III criteria, but did not include any minimum binge or purge frequency. Pyle, Mitchell, Eckert, Halvorson, Neuman, and Goff (1983) surveyed 1,355 freshmen college students using a self-report questionnaire based upon the DSM-III criteria and found that only 4.1% of the total population met the inclusion criteria for bulimia (7.8% of the females and 1.4% of the males

surveyed). When an additional criterion of weekly binge-eating was added to the criteria, the rates fell to 2.1%, or 4.5% of the females and .4% of the males. With the addition of weekly binge-eating and weekly self-induced vomiting, the rate fell to .6% of the total population (0.3% of the males and 1.0% of the females). Johnson, Lewis, and Love(1984) surveyed 1,268 female high school students using a criteria very similar to Pyle, Mitchell, Eckert, Halvorson, Neuman, and Goff (1983). They classified 4.9% as bulimic, using the DSM-III criteria with the added requirement of at least weekly binge eating. They stated, however, that the use of a more conservative criterion probably resulted in a number of false negatives, thus considerably reducing the reported incidence of bulimia.

Stangler and Printz (1980) reviewed the DSM-III diagnoses from the records of 500 patients at the University of Washington Student Psychiatric Clinic. They reported 3.8% of the sample as bulimic. Of the group so diagnosed, 89.5% were women, and 10.5% were men. Sinoway (1983) surveyed 1,172 freshmen college women at a large university and found that 13.7% reported bingeing, followed "always" or often" by purging, fasting, or dieting. This study did not use binge frequency as a criterion. Crowther, Post, and Zaynor (1985), surveyed 363 high school females, taken from four different high schools. Using the DSM-III criteria, they found that 7.7% of these high school girls satisfied the criteria for a diagnosis of bulimia. When these criteria were modified to include at least weekly binge eating, 19 (5.2%) of the subjects met these more stringent diagnostic criteria for bulimia. Finally, when these criteria were modified still further to include bingeing and purging only by means of self-induced vomiting or the use of laxatives and/or cathartics (e.g., Russell, 1979), only 10 subjects (2.8%) met the criteria for bulimia.

Hart and Ollendick (1985) surveyed both a university and a non-university setting in order to determine the prevalence of bulimia in both settings. The first sample of 139 women was obtained from employees in a large banking institution. The second sample of 234 women was obtained from a large university. Hart and Ollendick used a modified version of the DSM-III and found that 9% of the working women and 17% of the college students qualified when the following were endorsed: (a) binge eating, (b) self-deprecating thoughts, and (c) fears of not being able to stop eating voluntarily. The prevalence rates dropped to 1% and 5% when the presence of self-induced vomiting on a weekly basis was included. Carter and Moss (1984) screened for bulimia using a self-report questionnaire based on the DSM-III, then interviewed those with a probable diagnosis of bulimia. Although 16.7% of 162 female introductory psychology students reported binge eating, only 2.4% were diagnosed bulimic through subsequent interviews. Nagelberg, Hale, and Ware (1984) suggested that questionnaires may provide a more accurate report, as subjects are generally embarrassed and ashamed about their bingeing and purging and the anonymity of the questionnaire encourages more honest self-disclosure. Schotte and Stunkard (1987) conducted a self-report survey of bulimic behaviors with 1,965 students who were selected to provide a cross section of a large eastern university. They used both the DSM-III and the DSM-III-R criteria. In addition to the self-report questionnaire, randomly selected subjects were interviewed to search for the prevalence of both false-negatives and false-positives. Their questionnaires followed the DSM-III and DSM-III-R criteria more precisely than some of the previous studies, and they found only a 1.3% rate of bulimia for women and a 0.1% rate for men.

Drewnowski, Yee, and Krahn (1988) conducted a two-wave longitudinal survey to determine the incidence of bulimia nervosa among freshmen female students. The diagnostic questionnaire included items intended to approximate the DSM-III-R criteria. These criteria included (a) reported binge eating more than once a week during the previous month, (b) the reported use of fasting, laxatives, or self-induced vomiting during the preceding month, and (c) a fear of losing control during a binge. The prevalence rate of bulimia nervosa in the fall survey was 2.9% (27 of 931). Six months later, 3.3% of the female students (20 of 599) qualified for the classification of bulimia nervosa. Interestingly, the fall and spring semester bulimic respondents were not all the same women. Twelve new cases were found among the 20 women who qualified for the diagnosis of bulimia in the spring survey, representing a 2.1% incidence rate during the 6 month period. Spring data were also obtained for 18 of the 27 women who had been identified as bulimic in the fall survey. Only 8 of the 18 (44.4%) were still classified as bulimic.

Psychological Profiles of Bulimics

Over the years observations have been made concerning the psychological characteristics of eating-disordered individuals. These characteristics include (a) low self-esteem, (b) self-regulatory deficits, (c) body-image disturbance, (d) separation-individuation fears, (e) mood disorder, and (f) a tendency to be perfectionistic, compliant, and distrustful (Johnson & Connors, 1987).

Several researchers have used the Minnesota Multiphasic Personality Inventory (MMPI) to evaluate the level and type of psychopathology found among eating-disordered patients (Flanagan, 1984; Norman & Herzog, 1983; Pyle, Mitchell, & Eckert, 1981;). Flanagan (1984), for example,

compared the MMPI and Rorschach profiles of a bulimic group to two control groups. He found that the bulimic individuals showed (a) an inability to control impulses, (b) a lack of self-awareness, and (c) greater tendencies than controls toward depression and dissociation. He theorized that as a defense, the bulimics dissociate from their feelings. When this happens their cognitive processes loosen and they are not able to meet their needs or control their obsessive thoughts except through the discharge of impulse energy, through bingeing, purging, stealing, and alcohol or drug abuse. According to Flanagan, such persons become trapped in the bulimic cycle because they lack both an awareness of their needs and the ability to effectively meet those needs.

Pyle, Mitchell, and Eckert (1981) compared normal-weight bulimics to normal controls and found that the bulimics had significantly more overall psychopathology. Bulimics peaked on scales 4 of the MMPI (Psychopathic Deviance) and 2 (Depression), with Psychasthenia also above 70, indicating (a) chronic depression, (b) exaggerated guilt, (c) poor impulse control, and (d) low frustration tolerance. The high Psychasthenia and Schizophrenia subscales on the MMPI suggest that bulimics tend to be (a) rigid and meticulous, (b) worrisome, (c) apprehensive, and (d) dissatisfied with social relationships.

Norman and Herzog (1983) compared the MMPI profiles of normal-weight bulimics, restricting anorexics, and bulimic anorexics. The peak code profile of normal-weight bulimics indicated (a) poor impulse control, (b) acting-out behavior, (c) troubled family relations, (d) poor insight, (e) egocentricism, (f) shallow interpersonal relationships, (g) chronic depression, and (h) a vulnerability to addictive behaviors. The bulimic anorexics peak profile indicated (a) irritability, (b) alienation, (c)

underachievement, (d) unpredictability, (e) suicidal thoughts, (f) sexual conflicts, and (g) overall poor adjustment. In addition they tended to have high needs for affection, but were also suspicious and distrustful. The anorexics peak profile indicated (a) withdrawal, (b) depression, (c) anxiety, (d) alienation and agitation, (e) avoidance of close interpersonal relationships, and (f) fear of loss of impulse control.

Hatsukami, Owen, Pyle, and Mitchell (1982) examined the similarities between bulimics and other addictive populations. They compared female bulimics who had been screened for no history of alcohol or drug abuse to female inpatient substance abusers. Results indicated that the two groups had very similar profiles, and these findings were consistent with the previous MMPI findings for bulimics at normal weight. The bulimics did show a tendency toward more obsessive-compulsive symptoms, such as anxiety, ruminative thinking, and difficulty making decisions. These findings suggest that the nature of the self-regulatory difficulties bulimics experience is quite similar to those in the substance abuse population (Johnson & Connors, 1987).

In summary, the bulimic anorexics seemed to be the most disturbed. The bulimics at normal weight had significant pathology and were most like the bulimic anorexics in their vulnerability to impulsivity. All groups reported significant mood disorder characterized by chronic depression, irritability, and alienation.

Using the Eating Disorder Inventory, Garner, Olmstead, and Polivy (1983) found that normal weight bulimics had (a) elevated body dissatisfaction, (b) depression, and (c) lowered feelings of self-efficacy. Compared to a group of restricting and a group of bulimic anorexics, the normal weight bulimics showed equivalent or greater disturbance on all EDI

scales except Interpersonal Distrust. Hart and Ollendick (1985) reported similar results. They compared a group of bulimic and nonbulimic women and found that the bulimic women were significantly more pathological on six of the eight subscales. Only the perfectionism and interpersonal distrust scale scores were not significantly different between these two groups.

Numerous studies using a variety of tests have found that anorexics and bulimics report significantly lower self-esteem than normals (Johnson & Connors, 1987). The self-esteem problems appear to include (a) high self-expectations, (b) self-criticism and guilt, (c) high needs for approval from others, (d) external locus of control, (e) low assertiveness, and (f) interpersonal sensitivity (Connors, Johnson, & Stuckey, 1984; Katzman & Wolchik, 1984; Nagelberg, Hale, & Ware, 1984).

Both Johnson and Connors (1987) and Ordman and Kirschenbaum (1986) compared bulimics on the Symptom Checklist (SCL-90) to norms provided by Derogatis and Cleary (1977) for general psychiatric outpatients and normal controls. Their findings indicate that the bulimics report levels of symptomatic distress comparable to those reported by general psychiatric outpatients. Their specific symptom profile is characteristic of depressed individuals who are quite rejection-sensitive and self-deprecating.

To summarize, these research efforts reveal a consistent picture of the psychological correlates associated with the more extreme forms of disordered eating. It is difficult, however, to draw conclusions concerning the psychological and familial correlates of less severe forms of eating disorders because the research literature has looked almost exclusively at the extremes of bulimia, anorexia and bulimia anorexia.

Demographics

The samples surveyed in compiling demographic information concerning the prevalence of these disorders have been strikingly similar for both the clinical and community populations. This is especially striking considering the fact that two of the largest and most comprehensive surveys (Fairburn & Cooper, 1983; Johnson et al., 1982) were done on separate continents. Mail surveys were used in both of these community samples to investigate demographic and clinical features of bulimic behavior among individuals who had identified themselves as having problems with certain symptoms. Participants responded to several publications in magazines and newspapers on the subject of bulimia. Both projects received several thousand responses of which only subsamples were analyzed.

Johnson, Stuckey, Lewis, and Schwartz (1982) used a sample of 454 women who had written the Anorexia Nervosa Project at Michael Reese Medical Center requesting information on bulimia. Those who identified themselves as having a problem with eating were sent a letter that included information about the disorder as well as several questionnaires they were asked to complete. The response rate was 68%. Based upon their description of binge eating on the Eating Problems Questionnaire, it was possible to determine which respondents met the criteria for a diagnosis of bulimia (according to the DSM-III). Sixty-seven percent or 316 of the women met the criteria for bulimia. The results of the survey were obtained from these 316 women.

Ninety-six percent of the sample was caucasian, with the mean age 23.7. Over 83% reported having attended some college, and 50% reported being students at the time of the survey. The socio-economic status of the respondents' families of origin was determined from the father's education

and occupation (Hollingshead, 1957). The three largest categories were (a) high administrative or professional positions, comprised of persons with graduate level education, (b) high administrative or professional positions, and (c) administrative personnel, small independent business owners, and semi-professionals. Their living situations were evenly divided between living with (a) husbands or boyfriends, (b) with parents, or (c) alone. Fewer than 5% of the women were living with other women. Seventy percent of the respondents were single. They reported the average age of onset of the disorder was 18, and the mean of 5.4 years for the duration of the illness.

Fairburn and Cooper (1983) included the responses of 669 women in their analysis. Of the 499 respondents who met the criteria for bulimia nervosa, 70% were single, 20.7% married and 9% divorced. The mean age of the respondents was 23.8. The average age of onset of the eating disorder was 18, and the average duration of the illness was 5.2 years.

The clinical samples (Fairburn & Cooper, 1984; Herzog, 1982; Mitchell, Davis, & Goff, 1985; Pyle, Mitchell, & Eckert, 1981; Russell, 1979) were also quite similar to one another and to the community samples. The average age of onset of this disorder for the clinical samples was also 18. However, the community samples had included more younger ages of onset (12 percent under 15, compared to 6 percent under 15 in the clinical samples). The clinical samples on the other hand, had more patients with an older age of onset, 11 percent over 30, than the community samples with 3.2 percent over 30. The duration of the illness was also very similar between samples, with the average being approximately five years. All of the samples indicated that the patient population was predominantly Caucasian and that the distribution of religious affiliations was similar to population norms, with approximately 40% Protestant, 30% Catholic, 10-15% Jewish,

and 15% other/none. The majority of the clinical samples were also unmarried.

The weight status of bulimic subjects, both current and past, is not quite as consistent, although trends do emerge (Johnson & Connors, 1987). In the Pyle, Mitchell, and Eckert's (1981) sample, 74 percent weighed below the median weight for their height given in the Metropolitan Life Insurance Tables (a medium frame is used as the basis for all statistics). Thirty-five percent weighed below the minimum acceptable weight, although none were more than 15 percent below this weight. The results of Fairburn and Cooper's (1984) clinical sample were similar. None of their sample was below 25 percent of expected weight; 5.7 percent were 15 to 25 percent underweight; 65.7 percent were 1 to 15 percent underweight; 22.9 percent were 1 to 15 percent overweight; and 5.7 percent were greater than 15 percent overweight. The results of another large clinical sample (Mitchell, Hatsukami, Eckert, & Pyle, 1985) were quite similar. They also found none of their sample 25 percent below expected body weight (27.2 percent were 10 to 24 percent below the expected weight and 30 percent were 10 percent below that weight; 21.7 percent were 1 to 9 percent above expected weight; 15.7 percent were 10 to 24 percent overweight; and 4.5 percent were more than 25 percent overweight).

The two community samples of Johnson, Stuckey, Lewis, and Schwartz (1982), and Fairburn and Cooper (1983) were very similar. Johnson, Stuckey, Lewis, and Schwartz (1982) found that only 1 percent of the sample were below 25 percent of expected weight; 20 percent were 10 to 25 percent below expected weight; 61.6 percent were between 10 percent below and 10 percent above expected weight; and 17.5 percent were greater than 10 percent overweight. Fairburn and Cooper (1983) found none below 25

percent of expected weight; 2.1 percent were 15 to 25 percent below weight; 86 percent were found within a range of 15 percent below to 15 percent above, and 6.6 percent were greater than 15 percent overweight.

Combining the data from the clinical and community samples the trend was as follows: (a) approximately 70 percent of the samples were within a normal weight range, (b) 15 percent would be considered underweight, and (c) 15 percent overweight (Johnson & Connors, 1987).

Object Relations Theory

The theory of object relations rests fundamentally on the assumption that early relations between self and others give rise to the development of internal psychic structure (Urist, 1980). These internal psychic structures are thought to organize and make sense out of a person's feelings and conscious and unconscious ideas about the self, about other people, and about the relations between self and others. The development of the structural capacity for object relations is thought to be tied to the early, shifting relationship between the mother and infant. Such developmental shifts in childhood, if met with empathic responses from the environment, enable the child to experience relatedness between self and others, as well as to allow for the child's "internalization" of important functions previously performed by the parent, such as self-soothing and organizing of affects.

A number of investigators (Kohut, 1971, 1977; Mahler, 1971; Winnicott, 1960, 1965) have written about the early developmental stages of object relationships. Although there is disagreement about the timing of these developmental shifts and about the relative emphasis to be placed on cognitive, affective, or instinctual considerations, most of these investigators conceptualize this process using a shared maturational scheme. It is generally thought that object relations begin with an early "symbiotic" or

"primary narcissistic" phase, involving a lack of differentiation between images of self and images of not-self. The second phase is referred to as "separation-individuation," "secondary narcissism," or "need satisfaction," where there is clearly a psychological distinction between self and other but where the young child's interest in others is essentially narcissistic or self serving. In this phase others are defined as though they were still an extension of the self. In the third stage, "object relations constancy," definitions of both self and other achieve a sense of wholeness and continuity; others are interesting in their own right, no longer exclusively as potential providers of pleasure or frustration.

This developmental process has been described in numerous ways. Winnicott (1965) emphasized the infant's total dependence on the environment, particularly the mother, during the first years of his or her life. He thought that it was only with the mother's care that the infant was able to make the journey from absolute dependence, through relative dependence, to independence.

Winnicott (1965) proposed the term "holding environment" as a metaphor for the total protective, empathic care that the "good enough" mother provides the infant during the first few years of life. For Winnicott, holding covers a wide range of maternal functions. The literal physical holding is one important maternal function. This is the primary way that a mother can show her love at this stage. The term holding also includes protection from self- and environmentally-imposed injury. At a more affective level, it includes (a) the provision of emotional nurturance, (b) soothing when the infant experiences pain or excessive tension, and (c) acceptance and containment of the infant's normal grandiosity, as well as sexual and aggressive impulses. Finally, Winnicott emphasizes the

importance of the mother's general capacity to respond to the infant's fluctuating needs, in a reliable, but nonmechanical way, "a way that implies the mother's empathy" (Winnicott, 1960, p. 48).

At some early stage in the infant's development, and supposing adequate "holding," the infant will begin to separate and engage in exploratory, playful, and mastery-oriented activities that represent separation and a move towards individuation. The "good-enough mother" at this point must change her orientation to the infant as well. It becomes imperative that she acknowledge the end of total symbiosis, and her infant's new capacity to give a signal that can guide her in meeting the infant's needs. Winnicott (1960) believed that once this shift towards separation has begun, it is essential for the mother not to anticipate the child's needs, but rather to wait until the child initiated some expression of the need or state. The child would, thereby, learn that its' spontaneous expressions have their own validity and that he or she has a separate self which can be responded to. As the infant continues to develop, he or she will shift back and forth between a more autonomous and a more dependent position, and the mother must adjust her responses accordingly. The product of such "good-enough" care is a child with a buoyant and cohesive sense of self, who has capacities for creative self-expression and affective self-regulation, and who is comfortable asserting both needs for autonomy from, and intimacy with, others.

Mahler (1968) has offered a developmental theory of separation and individuation based on direct observational studies of the development of children during the first three years of life. According to Mahler's stage theory, an infant proceeds from an initial state of normal psychological autism to an intense symbiotic attachment (symbiotic phase). From within

the symbiotic matrix the child begins the gradual process of separation-individuation, which takes place in four subphases: (a) differentiation, (b) practicing, (c) rapprochement, and (d) on the road to object constancy.

Autism Phase

The autism period encompasses the month immediately after birth. It is believed that the infant is psychologically in a state of primitive hallucinatory disorientation and at this point has not specifically attached to a primary caretaker. Since attachment is nonspecific in the early stage, good-enough mothering involves attending to the infant's basic physiological needs.

Symbiotic Phase

The principal task of the symbiotic phase is attachment to the mother. During this phase, the infant behaves and functions as though he or she and the mother were an omnipotent system, a dual unity within one common boundary. The infant is completely dependent upon the mother for need gratification or internal regulation. It is during this stage that a complex pattern of mutual cueing between mother and child unfolds. During this phase the "good-enough" mother is able to allow attachment to occur without threat to her own boundaries, to decode the child's early efforts to communicate his or her need states, and to organize a response that attends to that need.

Separation-Individuation Phase

If the infant has developed a sense of confident expectation that the mother is capable of attending to his or her needs, the process of separation-individuation will begin to unfold. This latter process begins at around 4 to 5 months and lasts until 3 years. According to Mahler (1968), this process of separation-individuation has several pivotal points that can be

behaviorally observed and seem to reflect some specific cognitive and affective changes in the infant. Mahler's description of this period is very elaborate. In this description she identifies the complex and subtle interplay of the infant's developmental thrust toward autonomy, self-discovery, creativity, and mastery of the social and physical environment and the mother's ability to encourage the child to separate and explore in his/her own way while still being available for emotional "refueling." What is required of the mother becomes increasingly complex. She is needed to recognize and facilitate the child's various efforts to separate, while still being available for the child in a multitude of ways. The subphases of Mahler's "separation-individuation" are (a) differentiation, (b) practicing, (c) rapprochement, and (d) on the road to object constancy.

Differentiation. At about 4 to 5 months the infant is neurologically able to be more alert when awake. Attention, which has been primarily directed inward, gradually expands outward. At about 6 months the infant engages in tentative experimentation of differentiating self from others. From 7 to 8 months a behavioral pattern termed "checking back to mother" emerges that signals the increased somatopsychic differentiation. This increased differentiation of mother from others culminates around 9 months with the sometimes observed phenomenon of "stranger anxiety."

Practicing. The practicing subphase begins at approximately 10 months and lasts to about 16 to 18 months. Increasing locomotor maturation allows the infant to physically separate from the mother and to proceed with the development of autonomous ego apparatus. Psychologically this developmental stage is described as the time when the child has a "love affair with the world." This process depends upon the previous establishment of the mother as a safe anchor.

"Good-enough" mothering during this period involves accepting the gradual separation of the toddler and encouraging his or her interest in exploring the other-than-mother world. Of crucial importance, however, is the ability of the good-enough mother to be emotionally available for refueling, according to the child's needs (Mahler, 1968; Mahler, Pine, & Bergman, 1976).

Rapprochement. The rapprochement subphase begins around 18 months and extends to roughly 24 months. This subphase was labeled rapprochement to capture the ambivalent and often contradictory behavior of the child during this time.

The toddler's increased locomotor and cognitive abilities allow him or her to separate more and more from the mother. This increased separation also brings the awareness that moving away from mother means losing the feeling of parental omnipotence and "oceanic oneness" that has been experienced in the symbiotic dual unity. The observed reaction of the toddler is increased separation anxiety. During this phase toddlers become preoccupied with the mother's whereabouts and begin to actively seek her participation in the exploration and acquisition of new skills. This is a turbulent time for infant and mother. The child ambivalently struggles with wishes for symbiotic reunion with the mother on the one hand and fears of being re-engulfed in the symbiosis on the other. Behaviorally this is acted out by alternating sequences of shadowing and clinging to mom and then darting away and rejecting the mother's affectionate overtures (Johnson & Connors; Mahler, 1968; Mahler, Pine, & Bergman, 1976).

During this subphase the good-enough mother needs to comfort the child's fear of object loss by being available for emotional refueling and at the same time being able to relieve the fear of engulfment by allowing the

child to increasingly separate according to his or her needs (Mahler, 1968; Mahler, Pine, & Bergman, 1976).

One important aspect of the rapprochement phase is the emergence of the use of transitional objects. The transitional object becomes a concrete, symbolic representation of the mother's function of soothing and comforting. With good-enough mothering, the self-regulating function that the transitional object serves increasingly becomes internalized. The transitional object serves as a way-station between externally controlled and internally controlled self-regulation (Mahler, 1968; Mahler, Pine, & Bergman, 1976).

On the road to object constancy. The fourth subphase, which occurs around 36 months, is characterized by the unfolding of complex cognitive functions. These include (a) verbal communication, (b) fantasy, (c) reality testing, (d) the stabilization of self and other boundaries that allow for a sense of individuality, and (e) finally, the consolidation of object constancy. According to Mahler:

the slow establishment of emotional object constancy is a complex and multi-determined process involving all aspects of psychic development. Essential prior determinants are 1) trust and confidence through the regularly occurring relief of need tension provided by the need satisfying agency as early as the symbiotic phase. In the course of the subphase of the separation-individuation process, this relief of need tension is gradually attributed to the need satisfying whole object (the mother) and is then transferred by means of internalization to the intrapsychic representation of the mother; and 2) the cognitive acquisition of the symbolic inner representation of the permanent object (in Piaget's sense) in our instance to the unique love object: the mother. Numerous other factors are involved such as innate drive endowment and maturation, neutralization of drive energy, reality testing, tolerance for frustration and anxiety, and so forth. (Mahler, Pine, & Bergman, 1976, p. 110)

Kohut (1971) uses the term self-object to refer to the situation where self and other are no longer fused but are not yet experienced as separate,

continuous entities. Kohut emphasized that a narcissistic attachment refers not to the object of one's love (that is, it is not necessarily a cathexis of the self) but to the nature of the attachment (narcissistic versus object libido), so that others can be chosen as narcissistic objects (self-objects). In other words, a narcissistic attachment refers to an attachment where the other person is seen primarily as an extension of the self (a needed extension) as opposed to being perceived as separate, but desired, (as in the case of object libido). According to Kohut (1971) narcissism and object love run independent developmental courses. Narcissism, in his view, is not a more primitive form of object love, but rather an important parallel development in the people's capacity to love themselves.

Kohut (1971) emphasized the effect of early narcissistic injury and elucidates two narcissistic positions that, in his view, have major developmental significance. The first he called "idealized transference," where "after the disturbance of the equilibrium of primary narcissism, the psyche saves a part of the lost experience of global narcissistic perfection by assigning it to an archaic (transitional) self-object, the idealized part image. Since all bliss and power now reside in the idealized object, the child feels empty and powerless when he is separated from it" (p.27). The second position is that of "the mirror transference," where others are experienced only as audience to provide approval and validation of the grandiose self.

According to Kohut, normal development requires an empathic mother, who by modulating a sequence of gradual frustrations, encourages the child to experience psychic separateness from her. The process in which the child is slowly disillusioned about the assumed perfection of the idealized parent must also be gradual. When the disillusionment is provided in small doses, an internalization and structuralization of mental function previously

performed by external figures takes place. This capacity for internal modulation of such disappointments is critical for the child as it forms the basis for his or her capacity to regulate self-esteem. Kohut refers to this process of internalization as "transmuting internalization of psychic structure."

The developmental progression outlined by Mahler and Winnicott and Kohut, has been portrayed in numerous ways (Johnson & Connors, 1987). Regardless of the particular terminology, each theorist emphasized the idea of a gradual shift from an undifferentiated fused state of mother-infant symbiosis to an ultimate capacity for experiencing self and other as separate, as whole, as continuous, and as existing in their own right independently of the affective context or a prevailing need state. Regardless of the relative emphasis, most theorists attribute various clinical conditions, including disordered eating, to developmental failures in this early stage of object relations development (Urist, 1980).

Object Relations Disturbance Theories of Eating Disorders

There is growing consensus among researchers from different psychoanalytic vantage points that early developmental deficits play a significant role in the etiology of eating disorders (Geist, 1989; Johnson & Connors, 1987). Psychoanalytic formulations of bulimia hypothesize that bulimics demonstrate certain deficits or a "basic fault" in their ego structure as a result of early familial (primarily mother/child) relations. More specifically, they are referring to an impairment in ego functions which would allow the bulimic to insulate herself against overstimulation, soothe herself, and supply herself with tension reducing gratification (Geist, 1989; Goodsitt, 1983; Swift & Letven, 1984). As a result of these deficits, the bulimic chronically experiences intolerably high levels of internal tension

that seriously threaten an already weakened sense of self. The bulimic symptomatology is then seen as a defensive effort on the part of the person to "fix" this basic fault, and alleviate the internal tension (Geist, 1989; Goodsitt, 1983; Swift & Letven, 1984).

Goodsitt (1983) saw the bulimic's behavior as acting in two ways in an attempt to fix these self-regulatory deficits. First, Goodsitt characterized much of the bulimic's behavior as self-stimulation. He included not only the bingeing and purging, but the excessive exercising, and the need to be constantly on the go, as examples of this. Goodsitt saw this as necessary in order for the bulimic to drown out her internal feelings of deadness, emptiness, aimlessness, and the tensions associated with these feelings. Secondly, Goodsitt saw the binge-vomit cycles as providing a temporary sense of organization. The disturbing, vague, and amorphous feelings that preceded the binge are now replaced by intensely felt emotions that the bulimic can easily attribute to a discrete event: the binge. Other parts of the cycle serve the same organizing purpose. The self-recriminations, the obsessive concern with weight and calories, the repeated attempts to restrict food intake, these all become the central organizing event in the person's life. Casper (1981) also viewed the bulimic symptoms as a defensive structure needed to regulate and alleviate intolerable inner states. She felt that the fasting, so common between binges, "spuriously consolidates" the self-experience. The bingeing then exerts a brief tension alleviating effect while vomiting undoes the dependence on food by expelling (or rejecting) it.

Sours (1980) wrote that bingeing-vomiting cycles function to reduce internal tensions that threaten fragmentation of the self. In addition he postulated that bingeing represented a fantasized union with the idealized mother, while vomiting enabled the patient to get rid of the hated food.

Swift and Letven (1984) built upon the ideas of Casper (1981) and Sours (1980) in their theory of disordered eating. They made the following "cardinal" assumptions about the bulimic sequence. First, the bulimic behavior (i.e. the restrictive dieting, bingeing, vomiting, relaxation and repudiation) is seen as a behavioral reflection of deeply held, grossly contradictory attitudes toward food. Second, the shifting behavior of the bulimic cycle acts as a defensive movement that attempts to bridge the basic fault (i.e. the deficits in internal structure) and to fulfill vital human needs which cannot otherwise be met by this person. Lastly, they assume that her shifting relationship to food during the sequence is a concretization of her shifting relationship to human objects, whether it be the archaic parents, or contemporary interpersonal relationships.

Unfortunately, the bulimic solution is, of course, a maladaptive one; and, while it does succeed in partially alleviating the person's distress, it does not dispel it nor bridge that basic fault. Furthermore, it compounds her misery by beginning "a major biopsychological regression which places her at risk for serious physical sequelae" (Swift & Letven, 1984, p. 489).

Research Confirming Object Relation Theory of Disordered Eating

There is surprisingly little empirical support for the psychoanalytic theory of disordered eating (Humphrey, 1986a). One of the biggest problems in investigating these ideas has been the lack of measures which would tap the interpersonal and intrapsychic processes intrinsic to the psychoanalytic formulation of bulimia, that is: (a) comfort, (b) nurturance, and (c) affirmation of separate identity (Humphrey, 1986a). Humphrey and colleagues, using a self-report measure developed by Benjamin (1974), have been able to provide compelling empirical evidence for the hypothesized relationship between the dyadic mother/child relation, object relations

development, and disordered eating . This measure, The Structural Analysis of Social Behavior(SASB), quantifies indicators of affiliation-disaffiliation and independence-interdependence among family members on three different diamond shaped surfaces. These surfaces correspond to focus on "Other" (i.e., the way the significant other is perceived as behaving toward the subject), "Self" (i.e., the way the subject perceives their own reaction toward the other), and "Intrapsychic," (i.e., the introjection or internalizing of relationships with significant others).

In one of Humphrey's earliest studies (Humphrey, 1986a), parental relationships and introjects were compared among young women (n=80) with bulimia, bulimia-anorexia, anorexia, and normal controls using the SASB. The results revealed that the two bulimic subgroups experienced deficits in parental nurturance and empathy, relative to normal young women. Only these deficits in perceived parental nurturance were specific to bulimia. In addition, both bulimics and anorexics viewed their parents as more blaming, rejecting, and neglectful toward them relative to normal controls, and they treated themselves with the same hostility and deprivation. Humphrey interpreted these findings as supportive of the psychoanalytic hypothesis of binge eating in bulimia.

In another study (Humphrey, 1987) Humphrey compared family processes in 16 bulimic-anorexic and 24 nondistressed family triads, including fathers, mothers, and teenage daughters. Using the SASB, family members rated their interrelationships. As Humphrey predicted, the results revealed that families of bulimic-anorexics were (a) more belittling and appeasing, (b) ignoring and walling off, (c) less helping and trusting, and (d) less nurturing and approaching than were their nondisturbed counterparts. In addition, the bulimic-anorexics' introjects were more (a) self-oppressing, (b)

rejecting, and (c) neglecting, and less (a) self-exploring, (b) cherishing, and (c) enhancing than were those of normal young women

In still another study (Humphrey, 1988) relationship patterns were compared within anorexic, bulimic-anorexic, bulimic, and normal families. A total of 74 family triads, including father, mother, and teenage daughter, participated in the study. Each family member completed a series of ratings on their relationships using Benjamin's "SASB." Results were consistent with previous research and indicated that both bulimic subgroups experienced greater mutual neglect, rejection, and blame and also less understanding, nurturance, and support in their families relative to normal controls. On the introject ratings, daughters from all three groups of eating disorders were significantly more self-destructive than normal controls.

Humphrey (1987) and Humphrey, Apple, and Kirschenbaum (1986), did laboratory studies comparing families of bulimic anorexics with normal control families. They also used the Structural Analysis of Social Behavior (Benjamin, 1974). Participants were asked to discuss an aspect of their daughter's separation from the family, and interactions were videotaped and coded by trained observers. The findings were very consistent with those from the parallel rating scales in showing that families of bulimic anorexics were more (a) belittling, (b) neglectful, and (c) walled-off, as well as less (a) helpful, (b) trusting, and (c) nurturing toward each other when compared with normal control subjects.

Pole, Waller, Stewart, and Parkin-Feigenbaum (1988), investigated bulimic patients' perceptions of their parents using an instrument which is similar to the SASB: the Parker's Parent Bonding Inventory (PBI; Parker, Tupling, & Brown, 1979). The PBI is a self-report measure of perceived parental characteristics as subjects remember their parents in the first 16

years of their life. The parental contribution to bonding is scored on two bipolar axes defined as care and protection. The parental bonding possibilities are characterized as (a) "affectionless control" (low care, high protection), (b) "optimal bonding" (high care, low protection), (c) "affectionate constraint" (high care, high protection), and (d) "absent or weak bonding" (low care, low protection). Pole, Waller, Stewart, and Parkin-Feigenbaum (1988), administered this test to 56 female outpatients recruited consecutively from the University of Texas Health Science Center at Dallas Eating Disorders Clinic. All of these women met the DSM-III criteria for bulimia (determined by interview). The PBI was also given to 30 females who volunteered to serve as normal controls. On interview, they denied a history of eating disorders or depression. The results supported the hypothesis that bulimic patients differ from normal controls in their perception of parenting behavior during their first 16 years. The parenting quadrant that clearly distinguished the patients from controls was "optimal bonding" (i.e., high care, low protection), to which only 5.4% of bulimics assigned their parents as compared with 43.8% of controls. Bulimics also perceived their mothers as significantly less caring than did controls. This difference approached significance for fathers. For overprotection the group difference was significant for fathers but not for mothers. These findings, though less specific, support the general results of Humphrey's studies, in that it confirms that parents of individuals with disordered eating are significantly less caring than normal controls.

Humphrey's empirical work is impressive, and provides a substantial amount of evidence in support of the influence of early family relationships on object relations development and disordered eating. More specifically, Humphrey's studies identify eating disordered clients' relationship with their

parents as lacking in (a) affirmation, (b) encouragement, and (c) nurturance, and excessive in (a) neglect, (b) rejection, and (c) blame. The study conducted by Pole, Waller, Stewart, and Parkin-Feigenbaum (1988) also showed that parents of bulimics are perceived as less caring than normal controls. Humphrey's studies also showed that this lack of parental nurturance, empathy, and affirmation was accompanied by similar introjects. That is, the eating disordered clients treated themselves in the same neglectful, critical, destructive way that they had been treated by their parents. However, all of Humphrey's work, as well as the study by Pole, Waller, Stewart, and Parkin-Feigenbaum (1988), are aimed at the extremes of the eating disorder continuum, i.e. the bulimics, bulimic-anorexics, and anorexics. Again, would these same relationships hold true for less severe forms of disordered eating?

Several groups of researchers have investigated the application of object relations to the development of disordered eating in college women. Becker, Bell, and Billington (1987) requested 547 women at a midwestern university to complete two self-report measures for credit in a psychology course. The first measure was a bulimia inventory (Pyle et al., 1983). These responses were used to classify respondents into four groups: (a) 16(2.9%) bulimics who purged by vomiting or using laxatives or diuretics; (b) 40(7.3%) bulimics who severely restricted their diets, usually by fasting after episodes of bingeing, but who did not purge, (c) 183(33.5%) problematic eaters who reported depression after bingeing at least twice per month, but did not severely restrict or purge; and (d) 308 (56.3%) with no identified eating disorder.

The second measure was the Bell Object Relations Inventory (Bell et al., 1986). This scale consists of 45 true-false items and yields four subscale

scores (a) Alienation (ALN), (b) Insecure Attachment (IA), (c) Egocentricity (EGC), and (d) Social Incompetence (SI). The results supported their hypothesis that, compared with subjects who report non-bulimic eating patterns, those who report bulimic eating disorders show greater object relations disturbance in the area of insecure attachment. This is consistent with the theory that early developmental deficits in the self contribute significantly to the etiology and maintenance of disturbed eating (Bruch, 1985; Geist, 1989; Johnson & Connors, 1987).

In a more recent study conducted by Friedlander and Siegel (1990), 124 undergraduate (97%) and graduate (3%) women at a large northeastern university were offered \$2.00 for participating anonymously in a study concerned with personality, eating patterns, and family relationships. The researchers examined six predictor variables [i.e., scores on the four scales of the Psychological Separation Inventory (PSI; Hoffman, 1984) and on Olver, Aries, and Batgos's (1989) Differentiation of Self (DS) and Permeability of Boundaries (PB) scales], and nine criterion variables [i.e., the eight scales of the Eating Disorders Inventory (EDI; Garner & Olmstead, 1984)] and one item that assessed previous professional help seeking for eating problems. Their results suggested a strong relation between several aspects of psychological separation-individuation and the cognitions and behaviors known to distinguish clients with anorexia nervosa or bulimia. Specifically, they found dependency conflicts and functional impairment, along with a diminished sense of individuality, to be strongly predictive of bulimic behaviors, the pursuit of thinness, beliefs about personal ineffectiveness, interpersonal distrust, immaturity, and an inability to discriminate emotions and sensations. These researchers concluded that:

"failure to achieve a separate sense of identity, if not a predisposing factor, at least plays a role in maintaining the client's maladaptive patterns." (p. 77).

In another recent study, conducted by Heesacker and Neimeyer (1990), relationships between levels of eating disorder and disturbances in object relations and cognitive structure were investigated in 183 undergraduate females. Heesacker and Neimeyer used (a) two measures of eating disorders, [the Eating Disorder Inventory (EDI; Garner, Olmstead, & Polivy, 1983), and the Eating Attitudes Test (EAT; Garner & Garfinkel, 1979)], (b) one measure assessing object relations deficits, and (c) one assessing cognitive structure, using an interpersonal repertory grid.

Heesacker and Neimeyer (1990) found that more insecure attachment in formative, parental relationships was associated with greater eating disorder. In addition, using drive for thinness as a measure of disordered eating, higher eating disturbance was linked to higher Social Incompetence (the Social Incompetence scale measures interpersonal anxiety, shyness, and fears of loneliness and abandonment). Heesacker and Neimeyer concluded that this finding, together with the findings concerning Insecure Attachment, converge to create an image of eating disorder as reflecting a conflicting set of fears related to merger and autonomy. They state that: "From these attachment disturbances the individual derives a sense of the self as indefinite and ineffective"(p. 14).

The collective results of these three studies on college women provides convincing evidence in support of the theory that object relations disturbance is at the very least, predictive of disordered eating. More specifically, the results of the these three studies converge to create a picture of young women with eating disorders as having a diminished sense of individuality, with strong dependency conflicts, and interpersonal fears of loneliness and

abandonment. This picture reflects the intrapersonal deficits hypothesized to exist in individuals with object relations deficits (Mahler, 1968; Winnicott, 1965). However, these findings fail to adequately confirm the psychoanalytic theory of object relations and disordered eating because the researchers did not examine the first link in the theory [i.e., the idea that early family environment (especially the maternal/child relationship) influences level of object relations development]. Also, these studies provide no information concerning the relative contribution early family relations and object relations disturbance make to disordered eating. The present study attempts to address these two limitations.

CHAPTER III METHODOLOGY

Psychoanalytic theorists suggest that the nature of early familial relationships influence the development of disordered eating through the mechanism of object relations development. In this study these hypothesized relationships were investigated in a sample of college women. First, the relationship between the quality of the early family environment and the subject's level of object relations development was examined. Next, the link between disturbances in object relations development and disordered eating was explored. Finally, the relative influence of object relations development and early familial influence on disordered eating was investigated.

Research Design

A correlational design was used. Two conceptual variables, early family relationship quality and level of object relations development, were used to predict the criterion variable, the level of disordered eating. Early family relationship quality was examined by assessing the extent of hostility characterizing a subject's perception of her relationship with her mother. Level of object relations development was assessed by examining the styles in which the subject conducts her interpersonal relationships and experiences herself in relation to others. Level of disordered eating was examined by looking at the thoughts, feelings, and behavior that the subject endorses in relation to food and eating.

Early family relations of the subject were conceptualized in terms of the mother/daughter relationship, a significant dyadic relationship in the subject's early childhood. The Affiliation subscale of Benjamin's Structural Analysis of Social Behavior (1974) was used to assess this variable. The second predictor variable was the level of object relations development. Object relations was conceptualized by psychoanalytic theory as an internalization of experiences in early childhood relationships that produces internal self-other representations (Bell, Billington, & Becker, 1986).

Bellak and his associates contend that this internal structure can be discerned from the way an individual conducts her relationships and experiences herself in relation to others (Bell, Billington, & Becker, 1986; Bell, Metcalf, & Ryan, 1980; Bellak, Hurvich, & Gediman, 1973). This study used this conceptualization of object relations. This study used the Bell Object Relations Inventory (Bell, Billington, & Becker, 1986) for the assessment of this variable.

Population and Sample

Female college students enrolled as undergraduates at the University of Florida were the population from which the subjects in this sample were drawn. The University of Florida, with an enrollment of over 34,000 undergraduate and graduate students, 20 colleges, 140 departments, and 114 undergraduate majors, is among the 10 largest universities in the nation (University of Florida Office of Academic Affairs, 1990). It has a residential campus and has traditionally been characterized as a conservative southern university. The 1989 fall semester enrollment statistics revealed that 15,758 female students were enrolled at the university, comprising 45% of the total graduate and undergraduate student enrollment. Foreign

students accounted for over 6% of the student body, representing 102 countries; minority students accounted for approximately 10% of the enrollment. Non-Florida residents accounted for 4% of all students enrolled, representing every state in the nation. The vast majority of students enrolled at the university, 92%, were Florida residents, with students representing every county in Florida. This study collected data from 211 students.

Sampling Procedure

The sample was obtained through the Departments of Psychology and Sociology at the University of Florida. The subjects were students enrolled in three different undergraduate courses in the Spring Semester, 1991: a personal growth course; an abnormal psychology course; and a sociology course. These students were offered extra credit toward their class grades as an inducement to participate in the study. The data were collected during one of the regularly scheduled classes for the two psychology classes and were completed at home and returned on the day of finals for the sociology class.

The 211 female subjects of this study represented a wide array of demographic groups. Regarding marital status, 171 (94%) of the subjects who reported marital status were single, 3 (1.6%) were married, 5 (2.7%) were widowed or divorced, with 3 subjects (1.6%) indicating some other marital status. Twenty-nine subjects failed to report marital status.

Regarding race, 156 (85.7%) of the subjects reporting race were white non-Hispanic, 10 (5.5%) were Hispanic, 7 (3.8%) were black, 5 (2.7%) were Asian, 4 (2.2%) were of some other race, and 29 subjects failed to report race. Regarding age, 15 (8.2%) of subjects who reported age were 18 years of age, 33 (18.1%) were 19, 51 (28.0%) were 20, 47 (25.8%) were 21, 16 (8.8%) were 22, 19 (10.4%) were 23 or older, with 1 subject (0.05%)

reporting another age category not defined in the booklet. Twenty-nine subjects failed to report their age.

Regarding university major, of the subjects who reported a major, 7 (4.2%) majored in accounting, 8 (4.7%) in advertising, 1 (0.6%) in animal science, 9 (5.3%) in business, 3 (1.8%) in communications, 1 (0.6%) in counseling, 7 (4.2%) in criminology, 3 (1.8%) in economics, 5 (3.0%) in education, 3 (1.8%) in engineering, 10 (6.0%) in English, 1 (0.6%) in exercise and sports science, 1 (0.6%) in finance, 1 (0.6%) in health science, 4 (2.4%) in history, 1 (0.6%) in interior design, 1 (0.6%) in journalism, 2 (1.2%) in management, 6 (3.6%) in marketing, 1 (0.5%) in mathematics, 1 (0.6%) in microbiology, 3 (1.8%) in nursing, 1 (0.6%) in nutrition, 3 (1.8%) in occupational therapy, 2 (1.2%) in pharmacy, 5 (3.0%) in physical therapy, 2 (1.2%) in physician's assistance, 2 (1.2%) in political science, 1 (0.6%) in pre-med, 54 (32.0%) in psychology, 5 (3.0%) in public relations, 6 (4.0%) in rehabilitation counseling, 1 (0.6%) in science, 4 (2.4%) in sociology, and 1 (0.6%) in special education.

In summary, this sample was broad based in terms of majors and generally representative of University of Florida undergraduate students.

Instrumentation

Demographic Information

Information was obtained on the following variables by means of a demographic questionnaire in order to accurately describe the obtained sample: subject's age, racial status, marital status, and major in college.

Early Family Relationships

The subject's early familial relationships were conceptualized in terms of the dyadic relationship between the mother and daughter. The subject's perceived relationship with her mother was examined using the Benjamin

Structural Analysis of Social Behavior-Short Form (SASB, Benjamin, 1974). The SASB is a circumplex model of interpersonal relations and of their intrapsychic representations. It consists of three circumplex surfaces, each of which corresponds to a different focus of attention: (a) focus on other; (b) focus on self; and (c) intrapsychic. For this study, data from two circumplex surfaces, focus on self and focus on other, were used. Each surface or focus of the model comprises the same two primary, orthogonal dimensions of affiliation (horizontal axis) and interdependence (vertical axis). Affiliation extends from "attack" on the left side to "attachment" on the right, and interdependence ranges from "freedom" at the top to "control/submission" at the bottom. This study examined the relationship of the affiliation dimension to object relations development and disordered eating, as the previous research comparing bulimics, bulimic-anorexics, and normals suggested that the level of hostility versus affection, was the crucial variable in differentiating these groups (Humphrey, 1986a; Humphrey, 1988; Pole et al, 1988; Strober & Humphrey, 1987).

SASB-SF is a self-report instrument that is structured in a Likert scale format. It allows the rater to indicate degrees of agreement or disagreement on an interval scale ranging from 0-100 in 10 point increments. Anchor points are 0-Never/Not at All and 100-Always/Perfectly; a rating of 50 or above indicates "True." In addition, the subjects are instructed to indicate how well each question describes their mother when they were aged 5 to 10. For example, the subjects were asked to rate their level of endorsement of the following statement "She liked me and tried to see my point of view even if we disagreed."

The item content of the SASB model on which the SASB-SF self-report questionnaires are based has been developed in a multi-step iterative process

involving item generation and selection, guided by an underlying rationale. Several clinical and normal samples have taken the evolving versions and provided data that were subjected to autocorrelation, circumplex analysis, and factor analysis (Benjamin, 1974).

Autocorrelational analysis was employed as a within-subjects procedure. This revealed that for a given subject, adjacent data points along the circumplex tended to be endorsed in a similar fashion. This led to high correlations among adjacent points and negative correlations between opposite points. The circumplex analysis approach tested this logic on a between-subjects correlation matrix. Finally, the axes Affiliation and Interdependence were tested using a factor-analytic procedure with a transformation allowing graphic representations of the factor loadings in a two-space dimension (Guttman, 1966). Results of the autocorrelations, circumplex analysis, and two-dimensional space (affiliation by interdependence) were highly consistent across samples and individuals (Alpher, 1988). Benjamin (Alpher, 1988) has recently completed reliability studies for the SASB-SF. Average reliabilities for the pattern coefficients for the same form was .790 (range .667 to .898), and for equivalent forms was .655 (range .408 to .832). These test-retest coefficients are comparable to reported test-retest coefficients for subscales of the Wechsler Adult Intelligence Scale-Revised and Wechsler Intelligence Scale for Children-Revised.

The particular constellation of SASB-SF questions used in this study consisted of 32 questions. These include 16 questions concerning action directed toward another (Other Focus). Eight of these assess subjects' perception of their mothers' behavior towards them, and 8 concern their perceptions of their own actions towards their mothers. Sixteen questions

concern reactive behavior (Self Focus) and measure the subjects' perception of their mothers' "reaction" to them as well as their "reaction" to their mothers.

The Level of Object Relation Development

Object relations theory posits that personality develops from experiences in early childhood relationships that produce internal self-other representations. These internalizations serve as templates for contemporary experience (Bell, Billington, & Becker, 1986). With normal development these internal mental structures would grow more complex and differentiated in line with certain distinguishable stages of development. Psychopathology, or disturbed object relations, is said to result from a disruption of this natural developmental process (Mahler, Pine & Bergman, 1976; Urist, J., 1980).

Several theorist have given detailed descriptions of the process and sequential stages of object relations development (e.g., Kernberg, 1975; Mahler, Pine, & Bergman, 1976). Based on this idea that an individual's level of object relations development could be placed on a developmental continuum, there have been many efforts to empirically measure this construct. One of the more recent efforts (Bell, Billington, & Becker, 1986) is based on the assumption that level or quality of object relations can be deduced from the way individuals conduct their relationships and the way they experience themselves in relation to others. The development of the Bell Object Relations Inventory followed these assumptions (Bell, Billington, & Becker, 1986).

Consequently, in this study, the subject's experience of herself in relation to others and the way she conducts her relationships were measured by means of the four subscales on the Bell Object Relations Inventory (Bell,

Billington, & Becker, 1986). This inventory consists of 90 descriptive statements, which subjects respond to as "true" or "false" based on their "most recent experience". Scoring produces seven subscales, four that assess object relations, and three that focus on reality testing. For this study, only the object relations subscales were used. The four subscales were (a) Alienation, (b) Insecure Attachment, (c) Egocentricity, and (d) Social Incompetence. Alienation relates to a lack of basic trust in relationships, inability to attain closeness, and hopelessness about maintaining a stable and satisfying level of intimacy. High scorers may feel suspicious, guarded, and isolated and believe that relationships will be ungratifying and that ultimately others will fail them.

Insecure attachment relates to painfulness of interpersonal relations. High scorers on this subscale are likely to be very sensitive to rejection and to have neurotic concerns about being liked and accepted. Relationships are entered into as a result of a painful search for security, not from enjoyment of others as separate and unique; and, attempts by others to achieve a differentiated identity are viewed as threatening. Egocentricity subscale refers to three general attitudes toward relationships: (a) others' motivations are mistrusted, (b) others exist only in relation to oneself, and (c) others are to be manipulated for one's own self-centered aims. High scorers on this subscale may have a self-protective and exploitative attitude and be intrusive, coercive, and demanding. Social Incompetence refers to shyness, nervousness, and uncertainty about how to interact with other, especially members of the opposite sex. Items describe inability to make friends, social insecurity, absence of close relationships, and unsatisfactory sexual adjustment.

Subscales were developed through factor-analytic techniques. The authors report a high degree of discriminate validity by the BORRTI's ability to differentiate previously identified pathological groups. Also, concurrent validity was supplied by the BORRTI's relatedness to other measures of psychopathology. Subscales were also shown to have high internal consistency. For the four object relations subscales, coefficient alphas ranged from .90 to .78. Spearman-Brown split-half reliabilities ranged from .90 to .78, as well (Bell et al., 1986).

The Level of Disordered Eating

The level of disordered eating was the criterion variable and was assessed with the Eating Attitudes Test (EAT, Garner & Garfinkel, 1979). The EAT is a 40-item self-report questionnaire designed to measure the degree to which respondents possess a variety of behaviors and attitudes associated with disordered eating. Each item is rated from "always" to "never" on a six point Likert type scale. An example item from the EAT is, "(I) become anxious prior to eating."

Evidence for discriminant validity of the EAT derives from research showing that it is statistically independent of the Restraint scale, weight fluctuation, extroversion, and neuroticism. Evidence for construct validity comes from data on two separate samples indicating that the EAT scores of normal and anorexic subjects differed significantly. In another study, scores of recovered anorexics returned to the range of normal subjects (Corcoran & Fischer, 1987). Internal consistency reliability on two samples ranged from a coefficient alpha of .79 with only anorexics to .94 with a combined sample of anorexic and normal subjects (Corcoran & Fischer, 1987).

Data Collection Procedures

The experiment was conducted during the regularly scheduled classroom time for subjects enrolled in a psychology of personal growth course, and an abnormal psychology course. A questionnaire battery including the following tests was group administered to all volunteers: (a) the Structural Analysis of Social Behavior, (b) the Bell Object Relations and Reality Testing Inventory, and (c) the Eating Attitudes Test. Volunteers were solicited by offering them extra credit towards their course grade. The project was introduced by telling the class that the purpose of this research was to investigate the relationship between early family relations, feelings and beliefs about themselves in relationships, and eating attitudes and behaviors. In addition, they were told that the information collected would be used to expand our theoretical knowledge concerning how eating attitudes and behavior develop, and to help determine the direction of educational and therapeutic programs designed to enhance people's psychological well-being. The entire process, the introduction and data collection process took less than one hour. In the sociology course the project was introduced to the class in the same manner, except, the students were instructed to complete the test at home and return to the instructor 6 days later, at the scheduled time for the final exam. In addition, the students received a written copy of the introduction and test instructions. These students were also offered extra credit as an inducement to participate.

Hypotheses

The following hypotheses were tested in this study.

1. The level of hostility in the mother/daughter relationship (as measured by the Structural Analysis of Social Behavior, SASB, Benjamin, 1979) will be

positively associated with the four levels of object relations development demonstrated in the Bell Object Relation Inventory (Bell, Billington, & Becker, 1986), in this sample of college women.

2. The four levels of object relations development, as indexed by the Bell Object Relation Inventory (Bell, Billington, & Becker, 1986), will be positively associated with the level of disordered eating, as measured by the Eating Attitudes Test (EAT, Garner, & Garfinkel, 1979), among this sample of college women.

3. The level of hostility in the mother/daughter relationship, as measured by the SASB (Benjamin, 1979), will be positively associated with the level of disordered eating, as measured by the Eating Attitudes Test (EAT, Garner & Garfinkel, 1979), in this sample of college women.

4. The levels of Insecure Attachment, Social Incompetence, Egocentricity, and Alienation, as measured by Bell Object Relations Inventory (Bell, Billington, & Becker, 1986), and the level of hostility in the mother/daughter relationship, as measured by the SASB (Benjamin, 1979), taken together, will more strongly predict the level of disordered eating, as measured by the EAT (Garner & Garfinkel, 1979), than will the level of the four BORRTI object relations subscales alone or the level of hostility in the mother/daughter relationship alone.

Data Analyses

In order to assure uniformity across the entire sample on the variables of interest, preliminary tests were run to assess whether or not the three samples, drawn from three different classes, might significantly differ in their scores on the key variables of interest in this study. Six one-way analyses of variance (ANOVAs) were performed, one for each of the six key measures of this study. These measures were (a) Affiliation, (b)

Egocentricity, (c) Alienation, (d) Social Incompetence, (e) Insecure Attachment, and (f) the EAT. Class membership served as the independent variable and one of the six key measures as the dependent variable for each ANOVA.

A series of four Pearson Product Moment Correlation Coefficients were computed to test Hypothesis 1. These four correlation coefficients were calculated to assess the relationship between the Affiliation scale of the SASB and each of the four BORRTI object relations subscales. This statistic was chosen as it is designed to assess the magnitude of bivariate relationship between two continuous variables. Hypothesis 2 was also tested in this manner. Four correlation coefficients were calculated to assess the relationship between the scores on each of the four BORRTI object relations subscales and the scores on the EAT. Hypothesis 3 was also tested by computation of a Pearson Product Moment Correlation Coefficient. The correlation coefficient was calculated for the relationship between the scores on the SASB Affiliation subscale and the scores on the EAT. Hypothesis 4 was tested by comparing how much of the variance in the disordered eating scores (EAT) was explained by means of one hierarchical multiple regression analysis. In this multiple regression, the scores from the four BORRTI object relation subscales and the SASB Affiliation subscale scores were included as predictor variables, with EAT scores serving as the criterion. The SASB Affiliation subscale scores were entered first into the equation, followed by the four BORRTI subscale scores. Originally it was planned to analyze this hypothesis with two additional regression analyses. In the first, the four BORRTI subscales would have been entered as the predictor variables, with the EAT scores serving as the criterion variable. In the second equation, the scores on the Affiliation subscale of the SASB

would have been the only predictor variable, with the scores on the EAT as the criterion variable. From a comparison of the R-Squares for each of the three models, it would have been possible to determine whether or not the joint contribution of the object relations subscale scores and the Affiliation subscale scores would have contributed more to the variance in the EAT scores than would either the scores on the object relations subscale alone, or the scores on the Affiliation subscale alone. However, as the results of the first Hierarchical regression analysis (with the Affiliation subscale scores entered first) clearly revealed that the Affiliation subscale scores made no contribution to the variance in the EAT scores, no further analysis was required for Hypothesis 4.

CHAPTER IV RESULTS

This study was designed to examine the the relationships among object relations development, early family relationships, and disordered eating for college women differing in their disordered eating symptomatology. The sample consisted of 211 undergraduate women enrolled at the University of Florida in the 1991 Spring Semester. In this chapter the results of the study will be presented as they pertain to each of the four hypotheses.

Subsample Analysis

To assess whether the samples drawn from the three different classes might significantly differ in their scores on the key variables of interest in this study, six different one-way analyses of variance (ANOVAs) were performed. The scores of the three samples were compared on each of the six study variables: (a) Affiliation, (b) Egocentricity, (c) Alienation, (d) Social Incompetence, (e) Insecure Attachment, and (f) disordered eating symptoms (the EAT). Class membership served as the independent variable and one of the six key measures served as the dependent variable for each ANOVA. ANOVAs were appropriate for analyzing these data because the independent variable class was categorical and the dependent variables were continuous. As can be seen in Table 1 the results of these six ANOVAs indicate that the three classes did not differ significantly with respect to their scores on the six key variables of this study. Because classes did not

TABLE 1
MEANS, STANDARD DEVIATIONS, UNIVARIATE F RATIOS FOR THE SUBSAMPLES

Variables	Sample 1		Sample 2		Sample 3		F Ratio
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Mother Daughter Relationship							
Affiliation	11.000	6.030	12.404	5.580	11.346	6.493	0.309
Object Relations Development							
Insecure Attachment	-0.114	0.766	-0.026	0.771	0.126	0.775	0.780
Alienation	-0.387	0.578	-0.429	0.548	-0.303	0.649	0.460
Egocentricity	-0.287	0.681	-0.247	0.470	-0.236	0.524	0.110
Social Incompetence	-0.087	0.748	-0.169	0.641	-0.077	0.635	0.330
Disordered Eating							
Eating Attitudes Test	19.810	10.348	20.027	10.464	22.680	8.484	0.454

Note: N = 22 - 99

*p < .05 **p < .01 ***p < .001

significantly differ on their scores on key variables of this study, the three classes were combined for all other analyses.

Descriptive Statistics

Means and standard deviations were computed for each of the variables of interest in the study: (a) the quality of the mother/daughter relationship as indexed by the Affiliation dimension of the SASB; (b) the level of object relations development gauged by the four subscales of the BORRTI; and (c) the level of disordered eating symptoms endorsed, as indexed by the EAT. These are presented in Table 2. As can be noted, the sample as a whole reported relatively positive perceptions of the quality of the mother/daughter relationship, and moderate levels of object relations development and disordered eating symptoms.

Subjects' scores on SASB Affiliation dimension ranged from -8 to 18, with a mean of 11.7, and a standard deviation of 6.0. The highest score on the affiliation end of the continuum is 18, while -18 is the "hostility" end of the pole, with 0 indicating neutrality (an interaction which is rated neither hostile or affiliative). As can be seen from the mean and standard deviations, the majority of the responses were on the positive side of the scale, indicating that the subjects in this sample of college women characterized most of their interactions with their mothers as "affiliative" in nature.

Scores on the BORRTI alienation subscale ranged from -1.09 to 2.30, with a mean of -.037 and a standard deviation of 0.60. On the BORRTI egocentricity subscale, scores ranged from -1.259 to 2.958, with a mean of -0.256 and a standard deviation of 5.481. On the BORRTI Insecure Attachment subscale, scores ranged from -1.435 to 2.277, with a mean of -0.020 and a standard deviation of 0.778. For Social Incompetence, scores

TABLE 2
THE MEAN, STANDARD DEVIATION AND RANGE OF THE DEPENDENT AND INDEPENDENT
VARIABLES

Variable	Mean	S.D.	Range
Mother Daughter Relationship			
Affiliation	11.68	6.03	-8 to +18
Object Relations Development			
Insecure Attachment	-0.021	0.779	-1.435 to 2.277
Alienation	-0.369	0.603	-1.089 to 2.305
Egocentricity	-0.256	0.548	-1.259 to 2.958
Social Incompetence	-0.103	0.695	-0.972 to 2.121
Disordered Eating			
Eating Attitudes Test	20.279	10.144	1.000 to 81.000

ranged from -0.971 to 2.121, with a mean of -0.104 and a standard deviation of 0.695. When compared with the non-pathological norms for the BORRTI factor scores (Bell, 1989), all four of the subscale means fell between the 47th and the 52nd percentile. The standard deviation for Alienation was somewhat large, due to some extreme scores. All of the other standard deviations reflected a normally distributed population.

Subjects' scores on the Eating Attitudes Test ranged from 1 to 81, with a mean of 20.28, and a standard deviation of 10.1. These scores are slightly elevated when compared with the normal control sample ($n = 59$) used by Garner and Garfinkel (1979). Their normal group had a mean of 15.6 and a standard deviation of 9.3 (this sample also consisted of college females, with the average age of 22.4). The average EAT scores of a comparable group of anorexics ($n = 34$) used by Garner and Garfinkel (1979) was much higher, at 58.9 with a standard deviation of 13.3. Therefore, it appears that this group as a whole is comparable with the normal group used by Garner and Garfinkel (1979).

A frequency distribution indicated that on the EAT, 146 subjects (70%) fell between plus or minus one standard deviation of the mean, and 208 (99.9%) of the subjects fell between plus or minus two standard deviations from the mean. For statistical purposes, this distribution adequately approximates a normal curve, indicating that the variable of disordered eating, as measured by the EAT, is normally distributed in this sample of college females. In addition, there were 21 subjects (13.6%), who scored above the cut-off point between normal eaters and anorexics and individuals with serious weight concerns (Button & Whitehouse, 1981; Garner & Garfinkel, 1979).

Hypothesis Tests

Hypothesis 1. Hypothesis 1 predicted a positive association between the level of hostility in the mother/daughter relationship, as measured by the scores on the Affiliation scale of the SASB and the scores on each of the four BORRTI subscales. These subscales were (a) Alienation, (b) Insecure Attachment, (c) Egocentricity, and (d) Social Incompetence. This hypothesis was tested by a series of four Pearson Product Moment Correlation Coefficients, which were designed to assess the magnitude of the bivariate relationship between two continuous variables. As can be seen in Table 3, the correlation between the Affiliation scores and the Alienation scores was $r = -0.47$, $p \leq .001$, $n = 179$, suggesting that, as predicted, as the perceptions of the relationship between the mother and child increased in hostility, the subject's sense of alienation increased also. Likewise, the relationship between the Affiliation scores and the scores on the Social Incompetence scale was also significant, $r = -0.27$, $p \leq .001$, $n = 181$, suggesting that the greater the level of hostility reported in the mother/daughter relationships, the greater the level of the subjects' reported experience of shyness, nervousness, and uncertainty regarding social interactions. The relationship between the Affiliation scores and the scores on the Insecure Attachment scale was also significant, $r = -.18$, $p \leq .05$, $n = 180$. The relationship between the scores on the Affiliation subscale and Egocentricity subscale failed to reach statistical significance, $r = -0.138$, $p \leq .06$, $n = 180$. The results of these analyses provide partial support for this hypothesis, with three of the correlations between the Affiliation subscale scores and the four BORRTI subscale scores of sufficient magnitude to be statistically significant at the .05 level and with only one falling below that level.

TABLE 3
PEARSON PRODUCT-MOMENT CORRELATIONS AMONG VARIABLES

SUBSCALE	SUBSCALE					
	1	2	3	4	5	6
Mother Daughter Relationship						
1. Affiliation	1.000	-0.181*	-0.472**	-0.139	-0.266**	-0.073
Object Relations Development						
2. Insecure Attachment	-0.181*	1.000	0.417**	0.568**	0.279**	0.262**
3. Alienation	-0.472**	0.417**	1.000	0.470**	0.425**	0.032
4. Egocentricity	-0.139	0.568**	0.470**	1.000	0.202**	0.155**
5. Social Incompetence	-0.266**	0.279**	0.425**	0.202**	1.000	0.123
Disordered Eating Symptoms						
6. Eating Attitudes Test	-0.073	0.262**	0.032	0.155*	0.123	1.000

*p < .05 **p < .01

Hypothesis 2. Hypothesis 2 predicted a positive relationship between the EAT scores and the scores on each of the four BORRTI subscales. This hypothesis was also tested by a series of four Pearson Product Moment Correlation Coefficients. As can be seen in Table 3, the scores on two of the BORRTI subscales, Insecure Attachment and Egocentricity, correlate significantly with the scores on the Eating Attitudes Test. Scores on the other two subscales, Alienation and Social Incompetence, did not correlate significantly with the scores on the EAT. More specifically scores on the Insecure Attachment scale of the BORRTI ($r = 0.262, p \leq .0004$) were positively associated with high scores on the EAT, indicating that as predicted, the greater the respondents' reported experience in relationships of insecurity and fear of abandonment, the higher the level of disordered eating. Scores on the Egocentricity subscale ($r = 0.16, p \leq .038$) were also positively associated with high scores on the EAT. In contrast, scores on the Alienation subscale ($r = 0.03, p \leq .66$) and the Social Incompetence subscale ($r = 0.123, p \leq .10$) failed to achieve a statistically significant relationship with scores on the EAT, indicating that in this sample of women, the reported experience of social incompetence and distrust in relationships was not associated with the level of reported disordered eating behavior and attitudes. Because two of these correlations were significant and two were not, the evidence regarding hypothesis 2 is mixed.

Hypothesis 3. Hypothesis 3 predicted a positive association between the level of hostility in the mother/daughter relationship, as measured by the SASB Affiliation subscale scores, and disordered eating, as measured by the Eating Attitudes Test scores. This hypothesis was tested by a Pearson Product Moment Correlation Coefficient. As can be seen in Table 3, the results of this analysis fail to support this hypothesis, $r = -.07, p \leq .30, n =$

192, suggesting that, contrary to researchers' prediction, increased mother-child hostility was not significantly associated with more disordered eating.

Hypothesis 4. Hypothesis 4 predicted that the level of object relations development, as measured by the scores from the four BORRTI subscales, and the level of hostility in the mother/daughter relationship, as measured by the scores on the SASB Affiliation subscale, would more powerfully predict disordered eating, as measured by the EAT scores, than would either the scores for the Affiliation subscale alone or the scores for the four BORRTI subscales without the Affiliation subscale. This hypothesis was to be tested by comparing how much of the variance in the disordered eating scores would be explained by three regression analyses: one in which the Affiliation subscale scores would be entered as the first predictor variable, followed by the four BORRTI subscale scores (the EAT scores would serve as the criterion variable for each of these models); a second in which only the four BORRTI subscale scores would be entered as predictor variables; and a third in which only the scores on the Affiliation subscale would be used as predictor variables. By comparing the R-Squares from each of the three models it would have been possible to determine the contribution each of the predictor variables (i.e., the scores from the four BORRTI subscales and the Affiliation subscale) made to the variance in the EAT, as well the amount of variance they contributed together. However, the results of the first regression analysis (a hierarchical regression analysis, with the Affiliation subscale scores entered first), clearly revealed that the Affiliation subscale scores made no contribution to the variance in the EAT scores. In fact, as can be seen from Table 4, scores on the Insecure Attachment subscale were the only significant contributors to the variance in the EAT scores. The increment in the proportion of variance accounted for by

TABLE 4
HIERARCHICAL MULTIPLE REGRESSION ANALYSIS OF THE RELATIONSHIPS AMONG EARLY
FAMILY RELATIONSHIP, OBJECT RELATIONS DEVELOPMENT AND DISORDERED EATING

Independent Variables	F	
	Standardized Estimate	(df = 1,178) p
Mother Daughter Relationship		
Affiliation	0.004	0.02 0.890
Object Relations Development		
Insecure Attachment	0.264	14.11 0.0002
Alienation	-0.144	0.19 0.667
Egocentricity	0.053	0.32 0.573
Social Incompetence	0.100	1.52 0.220

R-Square 0.085

F 3.22 (5, 178, p = 0.008)

Insecure Attachment was .075. In addition, the results of the correlation analysis calculated for Hypothesis 3 revealed the lack of a significant correlation between the scores on the Affiliation subscale and the scores on the EAT. No further analysis was necessary in order to disprove this hypothesis.

Post-Hoc Analyses. In order to test the possibility that the variables of interest more strongly predicted disordered eating for only more extreme cases, it was decided that it might be informative to compare the results of individuals scoring above 30 on the EAT with those scoring 10 or below (score > 30, N=24; score < 10, N=17). The upper cutoff point of 30 was selected as this was the original point used by the test constructors (Garner & Garfinkel, 1979) to separate nonpathological eating scores from pathological ones (scores above 30 were considered pathological, those below 30 were considered normal). The lower cutoff point (10) was selected, because the number of individuals scoring below this point on the scale approximated the number of individuals in the High EAT group in this sample of college women. These two groups represented 31.3% of the total group, with 15% in the high scoring group (indicating an endorsement of more disturbed eating attitudes and behavior) and 16.3% in the low scoring group (indicating an endorsed absence of disturbed eating attitudes and behavior). A *t*-test procedure was used to determine if there were significant differences between these two groups in terms of the variables of interest.

As can be seen in Table 5, the Means for the High EAT Group did not differ significantly from the Means for the Low Eat Group, indicating that the variables of interest; Affiliation, Alienation, Social Incompetence, Insecure Attachment, and Egocentricity did not discriminate between

TABLE 5
COMPARISON OF HIGH AND LOW EAT GROUPS ON VARIABLES OF INTEREST

Variables	High EAT Group		Low EAT Group		T-Test
	Mean	S.D.	Mean	S.D.	
Mother Daughter Relationship					
Affiliation	12.192	5.507	11.500	7.023	0.375
Object Relations Development					
Insecure Attachment	0.170	0.720	-0.233	0.611	1.879
Alienation	-0.462	0.561	-0.441	0.617	-0.114
Egocentricity	-0.160	0.503	-0.304	0.387	0.993
Social Incompetence	-0.055	0.790	-0.126	0.795	0.284

Note: High EAT (score > 30), N = 24; Low EAT (score < 10), N = 17

*p < .05 **p < .01 ***p < .001

the extreme scorers on the Eating Attitudes Test, in this sample of college females.

Summary

The results of the data analyses were presented in this chapter. First, the results of a subsample analysis revealed that the three samples from which data was collected were not significantly different for any of the six variables in this study. Second, descriptive statistics were reported for the variables of interest in this study. These included the mean, standard deviation, and range for the distribution of scores on (a) the SASB affiliation subscale, (b) the four Bell Object Relation subscales, and (c) the Eating Attitudes Test. Each of these distributions was found to approximate a normal curve.

Next, the results from each of the four hypotheses were presented. Hypothesis 1 predicted that there would be a positive association between the level of hostility in the mother/daughter relationship (as measured by the scores on the SASB Affiliation subscale), and the scores on each of the four BORRTI subscales. Strong support was found for this hypothesis, as this association was found between the level of hostility and three of the four BORRTI subscales: (a) Alienation, (b) Insecure Attachment, and (c) Social Incompetence. The second hypothesis predicted a positive association between scores on the Eating Attitudes Test and the scores on each of the four BORRTI subscales. This hypothesis received partial support. Two of the four BORRTI subscale scores were positively associated with the scores on the EAT: (a) Insecure Attachment and (b) Egocentricity. Hypothesis 3 predicted a positive association between the level of hostility in the mother/daughter relationship, as measured by the SASB Affiliation subscale, and the scores on the EAT. This hypothesis did not receive support.

Hypothesis 4 predicted that the scores from the four BORRTI subscales and the SASB Affiliation subscale scores together would more powerfully predict the scores on the EAT than either one alone. This hypothesis was not supported. The BORRTT's Insecure Attachment subscale scores were the only significant predictors of scores on the EAT. Finally, the results of selected post-hoc analysis were presented.

CHAPTER V DISCUSSION

The purpose of this study was to explore the relationships among object relations development, early family relationships, and disordered eating for college women differing in their disordered eating symptomatology. In this chapter a discussion of the results will be presented in terms of the four hypotheses and the post-hoc analyses. Next, the limitations of the study will be discussed, followed by recommendations for future research and counseling.

Hypothesis 1

Hypothesis 1 tested whether or not the level of hostility in the mother/daughter relationship, as measured by the Affiliation Subscale of the Structural Analysis of Social Behavior (SASB, Benjamin, 1979), was positively associated with the level of each of the four BORRTI object relations subscale scores (Bell, Billington, & Becker, 1986), among this sample of college women. These subscales were: Alienation, Insecure Attachment, Social Incompetence, and Egocentricity. The hypothesis was partially supported, in that the Pearson Product Moment Correlation Coefficients were of sufficient magnitude to be statistically significant at the .001 level for two of the BORRTI subscales, Alienation and Social Incompetence, and at the .05 level for one of the BORRTI subscales, Insecure Attachment.

High scores on the Alienation subscale are theorized to be indicative of the respondent's basic lack of trust in relationships. In addition, high

scorers tend to characterize their social relationships as superficial, unstable, and ungratifying. It is thought that these individuals generally demonstrate serious difficulties with intimacy, and quite often withdraw from social interactions. The significant relationship calculated between the Affiliation scores and the scores on the Alienation subscale support the psychoanalytic theory of object relation development. This theory states that without an empathic, and nurturing parent, the child will fail to develop both a respect for self and a trust in others. These deficits are theorized to interfere in the individual's ability to establish a level of satisfying intimacy with others.

Elevations on the Social Incompetence scale are theorized to indicate shyness, nervousness, and uncertainty about how to interact with others, especially with members of the opposite sex. It further suggests a self-experience of social incompetence in which relationships appear bewildering and unpredictable. These feelings often cause intense anxiety, relieved only by avoidance and escape from the interpersonal field.

The significant relationship between the Affiliation scores and the scores on the Social Incompetence scale provide further support for the psychoanalytic theory of object relations development. The difficulties in relationships which are thought to accompany high scores on the Social Incompetence scale, are theorized by the psychoanalytic thinkers to be the result of inadequate early mother/child relationships. This school of thought proposes that if the child's mother is unable to provide an interpersonal context of safety, predictability, affection, and understanding, the child will be left with a sense of fear, uncertainty, and even dread in relation to others.

A correlation of the scores on the Affiliation subscale with those of the Insecure Attachment subscale, was also found to be statistically significant. This finding also supports the psychoanalytic theory of object

relations development. Individuals with high scores on the Insecure Attachment subscale are thought to be extremely sensitive to rejection and to have neurotic concerns about being liked and accepted. As a result, these individuals often enter into relationships because of a painful search for security, not from enjoyment of others as separate and unique. Again, this profile reflects an individual with serious impediments to attaining satisfying interpersonal relationships. The psychoanalytic theorists suggest that without an early "object" (usually the mother) to provide constancy, love, support, and appreciation for the growing child, the child will not be able to internalize a healthy self-love and self-respect. Therefore, the child will be forced to look to others for satisfaction of these neurotic needs.

Surprisingly, the scores on the Affiliation subscale were not significantly associated with the scores on the Egocentricity subscale. One possible explanation for this lack of significant findings, is that the level of affiliation in the early mother/daughter relationship is not able to differentiate young women with different scores on the Egocentricity scale. In other words, it is possible that the level of affiliation (or hostility, at the other end of the continuum) is not the critical ingredient in the development of the characteristics measured on the Egocentricity subscale.

There has been very little previous research investigating the proposed link between mother/child relationship and level of object relations development. Humphrey and colleagues (Humphrey, 1986a, 1986b, 1987, 1988, 1989; Humphrey, Apple, & Kirschenbaum, 1986) did report findings on the connection between parental behavior towards the child, the child's own active and reactive behavior towards the parents, and the child's own introjects. More specifically, they found that the daughters tended to treat themselves (along the dimensions of affiliation and control), in the same

manner that they were treated by their parents. Daughters reporting hostility, neglect, and lack of affection from their parents, also reported serious deficits in self-care and extreme self-destructiveness relative to normal controls. In addition, the daughters behaved in a complementary fashion towards their parents (i.e., if the parent were attacking and rejecting, the daughter would be protesting and withdrawing.). The negative correlation between the scores on three of the BORRTI subscales (Alienation, Social Incompetence, and Insecure Attachment) and the level of affiliation in the mother/daughter relationship, imply the same complementarity found by Humphrey and colleagues between the parent's behavior and the daughters' approach to relationships. These results are consistent with those found by Humphrey and colleagues. In addition, the relationship between early family relationship and object relations development was found in this study to exist on a continuum.

Hypothesis 2

Hypothesis 2 predicted a positive relationship between the scores on the Eating Attitudes Test and the scores on each of the four BORRTI subscales. These four subscales were: Alienation, Social Incompetence, Egocentricity, and Insecure Attachment. The Pearson Product Moment Correlation Coefficients were of sufficient magnitude for the scores between two of the BORRTI subscales and the EAT to be statistically significant at the .05 level. The two BORRTI subscales were Egocentricity ($r = .16, p \leq .038$), and Insecure Attachment ($r = 0.261, p \leq .0004$). The correlations between the two other BORRTI subscales, Social Incompetence and Alienation, and the scores on the EAT were not statistically significant (see Table 3).

These results support both previous research findings (Becker, Bell, & Billington, 1987; Friedlander & Siegel, 1990; Heesacker & Neimeyer, 1990) as well as the theory (Geist, 1989; Goodsitt, 1983) which suggest the existence of a relationship between disturbed eating and a particular pattern of object relations.

Psychoanalytic theorists speculate that women with higher levels of disordered eating tend to have deficits in their internal "object relations" structure. Much of the symptomatology in women with disordered eating is thought to be an effort on the part of these individuals to compensate for these deficits. One particular pattern which is theorized to exist in women with eating disorders, involves the experience of extreme insecurity in relationship to others. This includes excessive fears of abandonment and rejection, and a painful search for security, at the cost of real intimacy. The significant correlation between the scores on the EAT and the scores on the Insecure Attachment subscale support this theory.

In addition, the significant correlation between the EAT scores and the Egocentricity scores also support the psychoanalytic theory concerning the dynamics and development of disordered eating. Individuals scoring high on the Egocentricity subscale tend to endorse attitudes about relationships showing a basic mistrust of others' motivations and a self-protective, exploitive attitude in relationships. The psychoanalytic theorists suggests that these characteristics are also indicative of serious deficits in the individuals internal "object relations structure." It is these deficits that the disordered eating futilely attempts to rectify.

Becker, Bell, and Billington (1987), as well as Heesacker and Neimeyer (1990), reported finding a significant relationship between the scores on the BORRTT's Insecure Attachment subscale and disordered eating

in college women. In addition, Becker, Bell, and Billington (1987) also found a similar relationship between disordered eating and the scores on the Egocentricity subscale as well.

The results of this study support and extend the results of the research conducted by Heesacker and Neimeyer (1990). Heesacker and Neimeyer (1990) computed zero order correlations between the scores on each of the four BORRTI subscales and the scores on the EAT. They found significant correlations between the EAT scores, the scores on the BORRTI Object Relations Subscales of Insecure Attachment ($r = .16, p \leq .05$), and Social Incompetence ($r = .19, p \leq .01$). This researcher also found a significant correlation between Insecure Attachment ($r = .26, p \leq .0004$) and the EAT. In addition, a significant correlation was found between Egocentricity ($r = .16, p \leq .038$) and the EAT.

The results of this study were consistent with the widely held belief that early developmental deficits in the self contribute significantly to the etiology and maintenance of disturbed eating (Bruch, 1985; Garner & Garfinkel, 1985; Geist, 1989; Heesacker & Neimeyer, 1990).

Hypothesis 3

Hypothesis 3 predicted a positive relationship between the SASB Affiliation subscale scores and the EAT scores. The results of this analysis failed to support the hypothesis, suggesting that, contrary to prediction, increased mother-child hostility was not significantly associated with more disordered eating. These results were quite surprising, considering the consistent results Humphrey and colleagues have had in using this scale to differentiate eating disordered women from normal controls.

There could be several reasons for the lack of confirmation for this hypothesis. The test itself could be insensitive to the more moderate levels

of hostility one would expect in a non-clinical population, thereby failing to measure this variable adequately. In this sample of women, the distribution of scores on the SASB Affiliation subscale were skewed in the direction of positive affiliation, providing some support for this explanation (see Table 2). Another possibility is that the majority of respondents tended to give a socially desirable response (i.e. could have given a more positive evaluation of their early interaction with their mothers than actually existed). It seems intuitively reasonable that young adults, not having had much opportunity to reflect on their early childhood, nor to compare their experiences with others, would tend to assume that their experiences were normal and would wish to present themselves and their families as such. They would then have a tendency to portray these relationships in a normative fashion, normative being in the direction of more affiliation, and less hostility. In later readings, this researcher discovered that Benjamin (1988), in recognizing this possible "halo" effect, frequently asks for dual ratings, (e.g. "your mother's behavior towards you at its worst", as well as "Your mother's behavior towards you at its best"). Apparently she feels that this not only acknowledges the variability in relationships over time, but also indirectly addresses these potential social desirability response set problems. "After reporting marvelous health for the best state, many subjects can go on to give clinically important information about how bad it can get during the worst state." (Benjamin, 1988, p. 19). This research design requested only one rating of the mother/daughter relationship.

In addition, due to an already lengthy test protocol, this research project used the short-form of the SASB. While the reliability and validity data are good for this shortened form, it does reduce the original long-form from 144 questions covering the theoretical points on the control/affiliation

dimensions, to 32 questions. Perhaps the longer form could have identified a relationship between mother/child affiliation and disordered eating and increased the relationship between mother/child affiliation and object relations development as well. Longer tests produce higher reliability and therefore more statistical power.

Another possibility is that the EAT is not sensitive enough to measure some of the psychological and attitudinal correlates of subclinical disordered eating. The EAT primarily measures behaviors associated with abnormal eating. Perhaps an instrument such as the Eating Disorder Inventory (Garner, Olmstead, & Polivy, 1983), which focuses more on the psychological characteristics relevant to anorexia nervosa and bulimia, would have been more sensitive to a possible relationship with mother/child affiliation.

Another possibility is that some aspect of the relationship between mother and child, other than degree of affiliation, is crucial in the development of eating disorders.

Hypothesis 4

Hypothesis 4 predicted that the scores on the four BORRTI subscales plus the scores on the SASB Affiliation subscale would more powerfully predict EAT scores than would either the Affiliation subscale scores alone or the four BORRTI subscale scores without the Affiliation subscale scores. The results of the analysis revealed that the variable of Affiliation made no significant contribution to the variance in the criterion variable (the EAT scores). Further, as can be seen from Table 4, out of all the predictor variables (the Affiliation subscale and the four BORRTI subscales), only the scores on the Insecure Attachment subscale made a statistically significant contribution to the variance in the EAT scores. It is therefore clear that

hypothesis 4 was not supported. These findings support the results of the analysis of hypothesis 3, which found no significant relationship between the scores on the SASB Affiliation subscale and the EAT(see Table 3). These results reconfirm that the mother/child hostility, as measured by the SASB (Benjamin, 1979), does not predict disordered eating, as measured by the EAT, in this sample of college women.

As mentioned in the discussion of the results of hypothesis 3, it was surprising that early family relations, as measured by the SASB Affiliation subscale, did not contribute to the variance in disordered eating. These results were not predicted and contradict the research of Humphrey and colleagues(Humphrey, 1986a, 1986b, 1987, 1988; Humphrey, Apple, & Kirschenbaum, 1986) who have been able to consistently differentiate eating disordered women from normal controls using the SASB Affiliation subscale. Also, psychoanalytic theory of disordered eating would have predicted that early family relations contributed to the development of disordered eating. As mentioned previously, it is possible that the measure of hostility in the mother/daughter relationship, as well as the measure of disordered eating were not sensitive enough to capture the relationship between early family relations and disordered eating. It is also possible that this relationship does not apply to subclinical cases of disordered eating.

The theoretical connection between object relations disturbance and disordered eating is somewhat supported by these results. The scores on the Insecure Attachment subscale made a significant contribution to the variance in the EAT scores. Thus, the psychoanalytic theory that disordered eating is related to particular patterns of object relations is supported. More specifically, using the Eating Attitudes Test as the measure of disordered eating, more insecure attachment in formative, parental relationships was

associated with greater eating disorder. These results support clinical reports (Bruch, 1973) and empirical research (Becker, et al., 1987; Heesacker & Neimeyer, 1990) that link eating disorder to insecure attachments in current relationships.

Post-Hoc Analyses

In order to explore the possibility that the relationship between the variables of interest and the EAT would be different for more disordered eaters, a *t*-test comparison was made between high and low EAT scorers on all variables employed. The *t*-test procedure found no significant differences between the High and Low EAT groups for any of the variables of interest. These findings partially support the results of Hypothesis 2, which did not show a significant relationship between the scores on either the Alienation or the Social Incompetence subscales and the scores on the EAT. It was surprising that the *t*-test analyses revealed no significant differences between the High Eat scores and the Low Eat scores on the variables of Insecure Attachment and Egocentricity. Both of these subscale scores were found to be significantly correlated to the scores on the EAT in Hypothesis 2. One possible explanation is that the relationship between the Egocentricity scores and the scores on the EAT, as well as between the scores on Insecure Attachment and scores on the EAT, is present only for more moderate levels of disordered eating. It is also possible that these relationships were not powerful enough to be detected with the small *n*'s used in this analysis of the High-Low EAT scorer groups.

These findings also confirm the results of hypothesis 3, which also failed to demonstrate a significant relationship between the level of hostility in the mother/daughter relationship, as measured by the SASB Affiliation subscale, and the scores on the EAT. In addition, it strongly questions the

possibility that the level of hostility in the mother/daughter relationship, as measured by the SASB Affiliation subscale, operates even for the more extreme cases of disordered eating. From the results of hypothesis 3 and 4, as well as the t -test procedure, one would have to conclude that the level of hostility in the early mother/daughter relationship, as measured by the SASB Affiliation subscale, is not related to disordered eating.

This strongly contradicts the findings of Humphrey and her colleagues, (Humphrey, 1986a, 1986b, 1987, 1988; Humphrey, Apple, & Kirschenbaum, 1986) who consistently found significant differences on the SASB Affiliation dimensions between eating disordered subgroups and normal young women. Humphrey and her colleagues, however, recruited their disordered eating families from the University of Wisconsin Hospital and Clinic Eating Disorders Program. While the length of treatment for individuals varied, all had sought help for their eating problems and were receiving treatment. In addition, the EAT has been identified as more appropriate for detecting individuals with subclinical eating problems (Button & Whitehouse, 1981) than individuals with full-blown cases of anorexia nervosa or bulimia. Due to this fact, as well as the different context from which the samples were taken, one might speculate as to whether the samples used by Humphrey and her colleagues were more severe in their disordered eating symptomatology than even the scores in the High EAT group in this study's sample. Therefore it may be possible, that the association between the hostility in the early mother/daughter relationship, as measured by the SASB, and disordered eating, is valid only for individuals with more severe symptomatology.

Another possible reason for the difference in results, is that Humphrey and her colleagues used the long form of the SASB. This test consist of 144

items concerning the mother/daughter relationship, as opposed to the 32 items in the shorter version used in this study. Longer tests result in greater reliability and therefore greater validity.

Limitations

The population examined in this study was limited to undergraduate female college students at the University of Florida. The majority of subjects were between the ages of 17 and 22. While there were some ethnic minority students in the sample, they were not of sufficient numbers to be analyzed separately. As a result, it is difficult to determine if their responses systematically differed from those of the ethnic majority members. Therefore, generalization of the results of this study is limited to white females, between the ages of 17 and 22, attending undergraduate universities. Future studies might be conducted which include a larger sample of ethnic minority females, same age nonstudent females, and student and nonstudent males of the same age.

Due to the lack of significant findings in two of this study's four hypotheses, it has been concluded that two of the instruments used may have imposed limitations on the results. The test itself could be insensitive to the more moderate levels of hostility one would expect in a non-clinical population, thereby failing to measure this variable adequately. The distribution of scores on the SASB Affiliation subscale are skewed in the direction of positive affiliation, which is consistent with this explanation(see Table 2 for the distribution).

This research project used the short-form of the SASB. While the reliability and validity data are good for this shortened form, it does reduce the original long-form from 144 questions covering the theoretical points on the control/affiliation dimensions, to 32 questions. As longer tests produce

higher reliability and therefore more statistical power, perhaps the longer form could have identified a relationship between mother/child affiliation and disordered eating, and increased the relationship between mother/child affiliation and object relations development as well.

Another possible limitation was in this study's test protocol. Benjamin recognized the possibility of subjects giving a more positive evaluation of certain relationships than actually existed. She frequently controlled for these possible "halo" effects, by asking for dual ratings, e.g. "your mother's behavior towards you at its worst", as well as "Your mother's behavior towards you at its best". Benjamin feels that this not only acknowledges the variability in relationships over time, but also indirectly addresses these potential social desirability response set problems. "After reporting marvelous health for the best state, many subjects can go on to give clinically important information about how bad it can get during the worst state." (Benjamin, 1988, p. 19). This study only collected one rating of the subjects' relationships with their mothers.

Also, because all three instruments were in a self-report format, social desirability response set errors were possible. For example, subject's response bias in reporting eating attitudes, could effect the reliability, validity, and significance of the results. However, as the subjects were assured complete anonymity(their name were not used at all), most responses were considered to be honest.

Another possible limitation is that the EAT is not sensitive enough to measure some of the psychological and attitudinal correlates of subclinical disordered eating . The EAT primarily measures behaviors associated with abnormal eating. Perhaps an instrument, such as the Eating Disorder Inventory (Garner, Olmstead, & Polivy, 1983), which focuses more on the

psychological characteristics relevant to anorexia nervosa and bulimia would be more sensitive to a possible relationship with mother/child affiliation.

Another possible limitation could have been in this study's conceptualization of early family relationship. Perhaps some aspect of the relationship between mother and child other than degree of affiliation or control is crucial in the development of eating disorders. In this same logic, perhaps some other relationships, such as father/mother, or father/child, is important in identifying a relationship between early family relations and disordered eating.

Implications

To increase generalizability of the findings for this study, future researchers might examine the relationship between object relations and disordered eating using nonstudent females of the same age, different age groups, a larger group of ethnic minority females, as well as males.

To increase the validity, reliability, and power of the measurement of the early mother/daughter relationship, future studies might utilize more powerful instruments and research methodology. For example, future studies could utilize the long-form of the SASB, as well as incorporate the perception of the mothers concerning this early relationship to provide corroboration of the daughter's perception. Similarly, direct observation of family interactions could provide additional information on these independent variables. It would be interesting also to request a rating of relationships at their "worst" as well as at their "best". This strategy might be a more sensitive test of "hostility" between the mothers and daughters in this nonclinical population.

Considering the lack of significant findings in this study concerning the mother/daughter relationship and eating disorders, it would also be

interesting to broaden the focus and look not only at the level of affiliation in the mother/daughter relationship, but some aspect of the mother/father and father/daughter relationship as well. Perhaps within this broader context, the mother/daughter relationship would be a significant predictor of disordered eating. In addition, it would be interesting to look at family ratings, as these are theoretically intended to measure unique dynamics, entirely different from dyadic interactions. Also, although the level of mother/daughter relationship was significantly related to three BORRTI subscales, future studies including these other family ratings, could possibly explain an even greater proportion of the variance in object relations development as well.

In order to explore further the possibility of a relationship between the eating attitudes and behavior of college women and early family relationships, future studies might also use an eating disorder instrument that focuses more on the psychological correlates associated with bulimia and anorexia nervosa. Perhaps a more elaborate and statistically sensitive test would detect the presence of a relationship between these two variables.

The results of this study provide empirical support for the psychoanalytic hypothesis that a disturbance in object relations ego functioning may underlie disordered eating. However, because all of the studies confirming this relationship have been correlational, the presumed causal role of these variables remains untested. Future research needs to explore further the exact nature of this relationship.

The results of this study provide even more evidence for the relationship between level of object relation development and disordered eating. This indicates the need to design interventions with this age group which explore such relationship issues as ability to trust, security in

attachments, attitudes about self and self in relationships, and other issues related to object relations development.

Considering the linear relationship between disordered eating and object relations development, and the fact that disordered eating is so prevalent among this age group, counseling interventions should be designed for the less disturbed, "non-client." This intervention should address not only eating attitudes and behaviors, but core relationship issues as well. These interventions could improve the quality of life for these individuals and possibly prevent a worsening of their symptoms.

Summary

The results of this study suggest that there is a relationship between the perception of early family relations and level of object relations development, as well as between the level of object relations development and the level of disordered eating. The more hostility the respondents reported in their early relationship with their mothers, the more they endorsed items indicating the presence of certain relationship problems. These problems included a sense of distrust, and incompetence, fears of abandonment, and superficial and ungratifying relationships. Some of these same relationship issues, were also predictive of level of disordered eating. The fear of rejection and abandonment, and a search for relationships motivated by a need for security, rather than intimacy, were the primary predictors of disordered eating. Also, endorsement of items indicating a mistrust of others, and a self-protective, exploitive attitude in relationships were also related to the subjects' level of disordered eating. The relationship which this researcher predicted would exist between early family

relationship and level of disordered eating was not found to exist. Implications for research, theory, and counseling were suggested.

APPENDIX
INFORMED CONSENT FORM

Code # _____

Research Title: Relationship Between Eating Disorders, Early Family Relationships and Object Relations Development Among Undergraduate College Students.

Principal Investigator: Sandra Swinford-Diaz, Ph. D. Candidate
Counselor Education Department
University of Florida

The purpose of this research is to investigate the relationship between early family relations, feelings and beliefs about yourself in relationships, and eating attitudes and behaviors.. The information collected will be used to expand our theoretical knowledge concerning how eating attitudes and behavior develop, and to help determine the direction of educational and therapeutic programs to enhance people's psychological well-being.

Participation in this research project involves completing three short questionnaires: Eating Attitudes Test; Bell's Object Relations Inventory; and the Structural Analysis of Social Behavior.

The research project should take less than one hour to finish. To protect your confidentiality, code numbers will be used to identify you. Your name will not be written on any of the materials, so your responses will not be traceable to you.

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BIOGRAPHICAL SKETCH

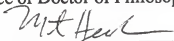
Sandra Swinford-Diaz was born in Fayetteville, North Carolina. She received her Bachelor of Arts degree in psychology from the University of Florida in 1969. After working for several years in a number of counseling positions, she returned to school. Sandra was admitted to the counseling psychology program at the University of Florida in 1981. Her area of subspecialization was marriage and family counseling. Other areas of specialized training included psychoanalytic approaches to counseling, and women's issues. She completed her doctoral internship in 1990 at the University of Florida Psychological and Vocational Counseling Center. Sandra received her Ph.D. in counseling psychology in August 1991.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



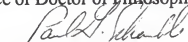
Ellen S. Amatea, Chair
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



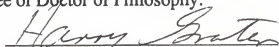
Martin Heesacker
Associate Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Paul G. Schauble
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Harry A. Grater
Professor of Psychology

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1991


Dean, College of Education

Dean, Graduate School